

CALL NO. 118

CONTRACT ID. 151271

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER DE05620551572

DESCRIPTION WEST MANSLICK ROAD (KY 2055)

WORK TYPE GRADE & DRAIN WITH ASPHALT SURFACE

PRIMARY COMPLETION DATE 8/15/2017

LETTING DATE: November 20,2015

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME November 20,2015. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 4%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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ADMINISTRATIVE DISTRICT - 05

CONTRACT ID - 151271 DE05620551572 COUNTY - JEFFERSON

PCN - DE05620551572 STP 8754 (007)

FAIRDALE / MANSLICK ROUNDABOUT (KY 2055) (MP 1.360) CONSTRUCT ROUNDABOUT AT WEST MANSLICK ROAD AND MT. HOLLY ROAD AT INTERSECTIONS OF FAIRDALE AND MITCHELL ROADS AS WELL AS PAVEMENT REHABILITATION (MP 1.420), A DISTANCE OF 0.06 MILES.GRADE & DRAIN WITH ASPHALT SURFACE SYP NO. 05-08501.00.

GEOGRAPHIC COORDINATES LATITUDE 38:06:17.70 LONGITUDE 85:45:31.80

COMPLETION DATE(S):

COMPLETED BY 08/15/2017

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer.

Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/29/12



Steven L. Beshear Governor Lori H. Flanery Secretary

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785

OFFICE OF THE SECRETARY

SECRETARY'S ORDER 11-004

FINANCE AND ADMINISTRATION CABINET

Vendor Document Disclosure

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

NOW, THEREFORE, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.08 Irregular Proposals 102.14 Disqualification of Bidders

102.09 Proposal Guaranty

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of _____ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 14-35 DBE, within 7 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These reports must be submitted within 14 days of payment made to the DBE contractor.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.kv.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

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ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

OPTION A

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.

SPECIAL NOTE

For Tree Removal

Jefferson County Roundabout Construction Item No. 5-8501

NO CLEARING OF TREES 3 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM APRIL 1 – OCTOBER 14.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone: (502) 564-7250.

SPECIAL NOTE FOR GUARDRAIL END TREATMENT TYPE 1

Contrary to KYTC Standard Drawing RBR-020-05 the guardrail end treatment ET-Plus manufactured by Trinity Industries will not be permitted as an option for bid item "Guardrail End Treatment Type 1".

SPECIAL NOTE FOR PIPELINE INSPECTION

- **1.0 DESCRIPTION.** The Department will perform visual inspections on all pipe on the project. A video inspection will be required on projects having more than 250 linear feet of storm sewer and/or culvert pipe and on routes with an ADT of greater than 1,000 vehicles. Conduct video inspections on all pipe located under the roadway and 50 percent of the remaining pipe not under the roadway. Storm sewer runs and outfall pipes not under the roadway take precedence over rural entrance pipes. Contractors performing this item of work must be prequalified with the Department in the work type J51 (Video Pipe Inspection and Cleaning). Deflection testing shall be completed using a mandrel in accordance with the procedure outlined below or by physical measurement for pipes greater than 36inches in diameter. Mandrel testing for deflection must be completed prior to the video inspection testing. Unless otherwise noted, Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.
- **2.0 VIDEO INSPECTION.** Ensure pipe is clear of water, debris or obstructions. Complete the video inspection and any necessary measurement prior to placing the final surface over any pipe. When paving will not be delayed, take measurements 30 days or more after the completion of earthwork to within 1 foot of the finished subgrade. Notify the Engineer a minimum of 24 hours in advance of inspection and notify the Engineer immediately if distresses or locations of improper installation are logged.

2.1 INSPECTION FOR DEFECTS AND DISTRESSES

- **A)** Begin at the outlet end and proceed through to the inlet at a speed less than or equal to 30 ft/minute. Remove blockages that will prohibit a continuous operation.
- **B)** Document locations of all observed defects and distresses including but not limited to: cracking, spalling, slabbing, exposed reinforcing steel, sags, joint offsets, joint separations, deflections, improper joints/connections, blockages, leaks, rips, tears, buckling, deviation from line and grade, damaged coatings/paved inverts, and other anomalies not consistent with a properly installed pipe.
- **C**) During the video inspection provide a continuous 360 degree pan of every pipe joint.
- ${f D}$) Identify and measure all cracks greater than 0.1" and joint separations greater than 0.5".
- **E**) Video Inspections are conducted from junction to junction which defines a pipe run. A junction is defined as a headwall, drop box inlet, curb box inlet, manhole, buried junction, or other structure that disturbs the continuity of the pipe. Multiple pipe inspections may be conducted from a single set up location, but each pipe run must be on a separate video file and all locations are to be referenced from nearest junction relative to that pipe run.
- F) Record and submit all data on the TC 64-765 and TC 64-766 forms.
- **3.0 MANDREL TESTING.** Mandrel testing will be used for deflection testing. For use on Corrugated Metal Pipe, High Density Polyethylene Pipe, and Polyvinyl Chloride Pipe,

use a mandrel device with an odd number of legs (9 minimum) having a length not less than the outside diameter of the mandrel. The diameter of the mandrel at any point shall not be less than the diameter specified in Section 3.6. Mandrels can be a fixed size or a variable size.

- **3.1** Use a proving ring or other method recommended by the mandrel manufacturer to verify mandrel diameter prior to inspection. Provide verification documentation for each size mandrel to the Engineer.
- **3.2** All deflection measurements are to be based off of the AASHTO Nominal Diameters. Refer to the chart in section 3.6.
- **3.3** Begin by using a mandrel set to the 5.0% deflection limit. Place the mandrel in the inlet end of the pipe and pull through to the outlet end. If resistance is met prior to completing the entire run, record the maximum distance achieved from the inlet side, then remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.
- **3.4** If no resistance is met at 5.0% then the inspection is complete. If resistance occurred at 5.0% then repeat 3.1 and 3.2 with the mandrel set to the 10.0% deflection limit. If the deflection of entire pipe run cannot be verified with the mandrel then immediately notify the Engineer.
- 3.5 Care must be taken when using a mandrel in all pipe material types and lining/coating scenarios. Pipe damaged during the mandrel inspection will be video inspected to determine the extent of the damage. If the damaged pipe was video inspected prior to mandrel inspection then a new video inspection is warranted and supersedes the first video inspection. Immediately notify the Engineer of any damages incurred during the mandrel inspection and submit a revised video inspection report.
- **3.6** AASHTO Nominal Diameters and Maximum Deflection Limits.

Base Pipe Diameter	AASHTO Nominal	Max. Deflection Limit		
•	Diameter	5.0%	10.0%	
(inches)	(inches)	(inches)		
15	14.76	14.02	13.28	
18	17.72	16.83	15.95	
24	23.62	22.44	21.26	
30	29.53	28.05	26.58	
36	35.43	33.66	31.89	
42	41.34	39.27	37.21	
48	47.24	44.88	42.52	
54	53.15	50.49	47.84	
60	59.06	56.11	53.15	

- **4.0 PHYSICAL MEASUREMENT OF PIPE DEFLECTION.** Alternate method for deflection testing when there is available access or the pipe is greater than 36 inches in diameter, as per 4.1. Use a contact or non-contact distance instrument. A leveling device is recommended for establishing or verifying vertical and horizontal control.
 - **4.1** Physical measurements may be taken after installation and compared to the AASHTO Nominal Diameter of the pipe as per Section 3.6. When this method is used, determine the smallest interior diameter of the pipe as measured through the center point of the pipe (D2). All measurements are to be taken from the inside crest of the corrugation. Take the D2 measurements at the most deflected portion of the pipe run in question and at intervals no greater than ten (10) feet through the run. Calculate the deflection as follows:
 - % Deflection = [(AASHTO Nominal Diameter D2) / AASHTO Nominal Diameter] x 100%

Note: The Engineer may require that preset monitoring points be established in the culvert prior to backfilling. For these points the pre-installation measured diameter (D1) is measured and recorded. Deflection may then be calculated from the following formula:

% Deflection =
$$[(D1 - D2)/D1](100\%)$$

- **4.2** Record and submit all data.
- **5.0 DEDUCTION SCHEDULE.** All pipe deductions shall be handled in accordance with the tables shown below.

FLEXIBLE PIPE DEFLECTION				
Amount of Deflection (%)	Payment			
0.0 to 5.0	100% of the Unit Bid Price			
5.1 to 9.9	50% of the Unit Bid Price (1)			
10 or greater	Remove and Replace (2)			

⁽¹⁾ Provide Structural Analysis for HDPE and metal pipe. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price. (2) The Department may allow the pipe to remain in place with no pay to the Contractor in instances where it is in the best interest to the public and where the structural analysis demonstrates that the pipe should function adequately.

RIGID PIPE REMEDIATION TABLE PIPE				
Crack Width (inches)	Payment			
≤ 0.1	100% of the Unit Bid Price			
Greater than 0.1	Remediate or Replace (1)			

⁽¹⁾ Provide the Department in writing a method for repairing the observed cracking. Do not begin work until the method has been approved.

6.0 PAYMENT. The Department will measure the quantity in linear feet of pipe to inspect. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit24814ECPipeline InspectionLinear Foot10065NSPipe Deflection DeductionDollars

FAIRDALE ROUNDABOUT AT KY 2055 (WEST MANSLICK ROAD) M.P. 1.4 ITEM # 5-8501 PUBLIC INFORMATION PLAN

The primary goal of the Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) which includes shoulder, lane and full road closures. The KYTC District 5 Public Information Officer (PIO) will coordinate and disseminate to stakeholders and the media appropriate information regarding the construction plans.

LOCAL STAKEHOLDERS

- Elected Officials
 - o State Senator Dan Seum (502) 564-8100; dan.seum@lrc.ky.gov
 - o State Representative Jeffery Donohue (502) 564-8100; jeff.donohue@lrc.ky.gov
 - o Mayor Greg Fischer (502) 574-2003; greg.fischer@louisvilleky.gov
 - o Metro Councilman Vicki Welch (502) 574-1113; vicki.welch@louisvilleky.gov
- Local Agencies
 - o Rick Caple, Director of Transportation for Jefferson County Public Schools (502) 485-3470; <u>richard.caple@jefferson.kyschools.us</u>
 - o Barry Barker, Transit Authority of the River City (TARC) (502) 561-5100; jbarrybarker@ridetarc.org
 - o Lt. Joe Seelye, Louisville Metro Police Department Traffic Division (502) 817-9958; joe.seelye@louisvilleky.gov
 - o Chief Donald Wittry, Fairdale Fire Department (502) 366-0122;
- Utility Companies
 - Local utility companies are kept apprised of this project at the monthly utility coordination meetings hosted by District 5
- Neighborhoods and their Mayors

TRUCKING FIRMS AND OUT OF STATE STAKEHOLDERS

Information will be distributed electronically to trucking firms via Rick Taylor at the Department of Vehicle Regulation (502-564-4540; <u>rick.taylor@ky.gov</u>). Information will also be posted on the 511 website (www.511.ky.gov) and on the 511 telephone information system.

PRESENTATIONS

A project description including anticipated schedule will be provided to the media, stakeholders and other emergency service agencies via e-mail prior to construction. Information will be

provided to these groups via traffic advisories, press releases, the District 5 website and the weekly District 5 Road Show of Construction and Maintenance Activities.

MEDIA RELATIONS

The District PIO will prepare an initial news release regarding the contract award for the project. The PIO will conduct interviews with the media throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. The contractor must provide to the PIO via the Resident Engineer notification of any change in the MOT at least five (5) days prior to the change.

Jeff Wolfe - Director Phone (502) 564-3020 FAX (502) 564-7759

DIVISION OF TRAFFIC OPERATIONS

RECOMMENDATION FOR PICKUP OF ITEMS TO BE INSTALLED ON TRAFFIC SIGNALS/LIGHTING

Item Number:	5-8501.00				
County:	jefferson				
Description:	Ку 2	055 school flasher for near round about			
Special items					
2		Complete solar school flasher system	special order		
SPUTOUNTY 0554572			Contract ID: 1512/1		
2 T-	04-0150	Lighting Pole 30' w/no arm mongoose luminaire			
Electrical Contrac	ctor Name				
Electrical Contrac	ctor Supervisor		Contact number for Superv	<i>r</i> isor	
Project Engineer		Contact number for Project	Contact number for Project Engineer		
	attests that the me ect Engineer or De	entioned contractor is the actual electrical contractor on this esignee	project		

SPECIAL NOTE FOR STAMPED CONCRETE PAVEMENT

I. DESCRIPTION

Except as specified herein, perform all work in accordance with Section 501-"JPC Pavement, PCC Base and JPC Shoulders" of the Department's Standard Specifications for Road and Bridge Construction.

Furnish all equipment, labor, materials and incidentals to construct stamped integrally colored concrete pavement in the truck aprons and splitter islands to the lines and grades shown on the plans. This work includes layout, forming, integral colored concrete with a stamped pattern finish, dry-shake colored hardener, color curing and sealing compound, joint sealer and all other incidental materials. Color shall be integral and homogenous throughout the full depth concrete section. Surface color and durability shall be enhanced by the use of dry-shake colored hardener.

II. MATERIALS

- A. Concrete shall comply with Subsections 601.02 and 601.03 of the Department's Standard Specifications except as modified herein.
- B. Colored admixture for Integrally Colored Concrete shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime proof and UV resistant. Admixture shall be non-fading finely ground synthetic mineral-oxide coloring pigment and water reducing wetting agent conforming to the requirements of ASTM C979, ASTM C494, and AASHTO M194. The admixture shall be a Brick Red colorant and the Contractor shall submit a proposed color sample to the Engineer for approval prior to purchasing product.
- C. Dry-Shake Colored Hardener shall be a cementitious material containing special hard aggregates, formulated as a high opacity color hardening material for the top surface of freshly placed concrete. Hardener shall be from the same manufacturer as the colored admixture. Hardener shall be highly UV resistant, factory proportioned, mixed and packaged, ready to use and conform to ASTM C979. The color of the hardener shall be the same as the Integral Concrete Colorant and the Contractor shall submit a proposed color sample to the Engineer for approval prior to purchasing product.
- D. Pattern Imprinting Tools shall be stamp mats of semi-rigid polyurethane with projected texture and ridged underside capable of imprinting texture and joint patterns into plastic concrete. Pattern shall be a running bond brick, cobblestone or similar type pattern. The Contractor shall submit a pattern sample to the Engineer for approval prior to construction of any Stamped Concrete Pavement.

Stamped Concrete Pavement Page 2 of 4

- E. Liquid Release Agent shall be a colorless liquid formulated to break the bond between the pattern imprinting tools and surface of the color-hardened concrete. Agent shall evaporate completely, leaving no residue.
- F. Curing Compound for Dry-Shake Colored Hardener Concrete shall be from the same manufacturer as the colored admixture, for use with dry-shake colored hardener and comply with ASTM C309. Note: white pigmented concrete curing compound shall not be used on colored concrete.

III. CONSTRUCTION

- A. Examine base course to assure it conforms to the required lines, grades and cross sections.
- B. Contrary to the Standard Specifications and Standard Drawings, Load Transfer Assemblies will not be required.
- C. Place concrete and move into place with square-tipped shovels or concrete rakes.
- D. Consolidate all concrete with mechanical vibratory equipment throughout its full width and depth.
- E. Concrete shall be struck to the specified level with wood or magnesium straight edge or mechanical vibrating screed. Concrete surface shall be further leveled with magnesium bull float.
- F. Mechanically float the concrete surface as soon as concrete has taken its initial set and will support weight of a power float machine equipped with float shoes or combination blades and operator. The Engineer may allow hand floating in areas of narrow width or other small irregular dimensions where operation of mechanical equipment is impractical.
- G. Apply Dry-Shake Colored Hardener:
 - 1. Apply 2/3 of manufacturer's application rate to freshly floated concrete surface. Bleed water shall not be present during or following application of first and second shake.
 - 2. Do not throw dry-shake. Distribute evenly by hand or mechanical spreader designed to apply floor hardeners.
 - 3. Allow enough "wet-out" time, as recommended by the manufacturer, for proper amount of moisture to wick up from concrete and be absorbed by the color hardener before trying to float surface.
 - 4. As soon as dry-shake material has absorbed moisture, indicated by uniform darkening of surface, float concrete surface a second time, just enough to bring moisture from base slab through dry-shake hardener.

Stamped Concrete Pavement Page 3 of 4

- 5. Immediately flowing second floating, apply remaining 1/3 of specified application rate of dry-shake colored hardener.
- 6. As soon as dry shake material has absorbed moisture, mechanically float concrete surface a third time. As surface further stiffens, remove float blades to expose the power finishing blades or raise combination blades slightly. Flat trowel surface as necessary to remove marks and pinholes.
- 7. Do not burnish trowel colored surface as pavement hardens.

H. Apply Pattern/Texture Stamping:

- 1. Apply Liquid Release Agent in accordance with manufacturer's recommendations.
- 2. Apply pattern imprinting according to tool manufacturer's instructions.
- 3. While concrete is plastic, accurately align mats or stamping tools and uniformly press into concrete to produce imprinted pattern, texture and depth of imprint recommended by manufacturer. Touch up pattern and finish edges with hand tools as necessary.
- 4. Minor variations in appearance of stamped colored concrete, which are similar to natural variations in color and appearance of uncolored concrete, are acceptable.

J. Stamped Colored Concrete Curing and Sealing:

- 1. Protect concrete from prematurely drying and from excessive cold or hot temperatures that would alter normal curing process.
- 2. Cure pavement with liquid membrane curing compound as recommended by manufacturer. Apply immediately after pavement has hardened sufficiently so that application of curing compound will not mar surface. Apply uniformly over entire surface at coverage rate recommended by manufacturer and meeting or exceeding the moisture retention requirements of ASTM C309.
- 3. Take precautions in hot weather to prevent plastic cracking resulting from excessively rapid drying of the surface.
- 4. Do not cover concrete with plastic sheeting.
- 5. There shall be no free water on surface at time of application.

K. Joints:

1. Construct sawed contraction joints such that the maximum edge dimension of individual slabs shall not exceed 15 feet. Closer joint spacing will be required for narrow width slabs. The Contractor shall submit a joint pattern layout to the Engineer for approval prior to construction of any Stamped Concrete. Do not saw joints until the concrete has

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Stamped Concrete Pavement Page 4 of 4

hardened to the extent that tearing and raveling will not occur and sawing machinery will not mar textured and colored surface, but as soon as necessary to preclude random cracking.

- 2. Seal all joints as soon as practical and configure sealant according to the Standard Drawings.
- 3. Use Silicone Rubber Seals in accordance with subsection 501.03.18 of the Department's Standard Specifications on all Stamped Colored Concrete Pavement.
- 4. Use caution during application of seal material and during tooling to avoid excess material from adhering to pavement surface outside the limits of the joint.
- L. Protect finished Stamped Colored Concrete Pavement from vehicular or foot traffic until paving has reach sufficient strength and is inspected and approved by the Engineer.
 - 1. Repair damaged areas in accordance with the color admixture manufacturer's instructions.

IV. MEASUREMENT

- A. The Department will measure the quantity in square yards according to the Plan dimensions as shown in the Record Plans. The Department will determine the final quantity based on design quantity with increases or decreases by authorized adjustments.
- B. The Department will not measure joint construction, joint sealing, form pins, stamping and texturing, color admixture, dry-shake color hardener, curing compound, release agent, drilling holes for form pins, cement for normal and high early strength and all other items necessary to construct the stamped pavement according to the Contract and will consider them incidental to this item of work.

V. PAYMENT

- A. The Department will make payment for the completed and accepted quantity area multiplied by the Contract unit price for Stamped Concrete Payement and the Price Adjustment.
- B. The Department will adjust the Contract unit price by the Schedule for Adjusted Payment for Thickness Deficiency shown in Subsection 501.05.01 of the Department's Standard Specifications. The Department will not make additional payment for average thickness of payment in excess of the specified thickness.
- C. The Department will not apply a Ride Quality Adjustment to Stamped Concrete Pavement.

SPECIAL NOTE FOR UNDERGROUND STORAGE TANK (UST) - REMOVAL

The existing underground storage tanks (USTs) on this project are located on the property that formerly operated as a BP gas station (Parcel 5). The Roadway Contractor is **NOT** responsible for the removal and closure of the existing USTs. KYTC has hired an environmental contractor for the removal and closure of these tanks.

SPECIAL NOTE FOR ASBESTOS CONCRETE (AC) PIPE - REMOVAL COORDINATION

The existing water main on this project is asbestos concrete (AC) pipe. The Roadway Contractor is **NOT** responsible for the removal and disposal of the existing AC pipe. KYTC has hired an environmental consultant for the removal and disposal of this pipe. The Roadway Contractor **IS** responsible for coordination and scheduling with environmental consultant for the removal of the AC pipe including tie-in coordination.



Kentucky Transportation Cabinet Division of Highway Design TRAFFIC MANAGEMENT PLAN

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Item No. 5-8501.00 Jefferson County Fairdale Road/Manslick Road (KY 2055)/ Mitchell Hill Road/Mount Holly Road (KY 2055) Intersection Improvement

Traffic Management Plan Overview

Project Goals and Objectives

- Construct Roundabout Intersection to improve safety and increase traffic flow through the intersections.
- Realign Mitchell Hill Road to intersect Manslick/Mt. Holly Roads at the existing intersection with Fairdale Road.
- Provide multi-use path along southwest side of Manslick Road, northwest side of Mitchell Hill Road and northwest side of Fairdale Road approaches. Provide 5' wide sidewalk along both sides of Mt. Holly Road and remaining side of all other approaches.
- Design approach roadways for 30 MPH design speed.
- Maintain existing drainage patterns.
- Minimize impact to existing adjacent properties and businesses.
- Use AASHTO 2004 design criteria for original design that was retained for final plans.

Temporary Traffic Control Plan

Development of Project Schedule

- Permitted Lane Closure Times
 - Two Lane Two-Way traffic to be maintained between the hours of 6:00 a.m. to 9:00 a.m.; 3:00 p.m. to 7:00 p.m.; and during holidays and community festivals.
 - One Lane traffic by using flagmen will be allowed between the hours of 9:00 a.m. to 3:00 p.m. and 7:00 p.m. to 6:00 a.m. at the discretion of the Engineer.
 - Liquated damages to be assessed to the Contractor for exceeding the allowable period for lane closures.
- Permitted Fairdale Road Closure
 - The Fairdale Road approach to be closed for a period not to exceed 15 calendar days during Phase II.
 - Sign a detour route using KY 1020 and KY 2055.
 - Liquated damages to be assessed to the Contractor for exceeding the allowable period for closure.
- Time to Construct Project
 - o Project to have a fixed completion date. (August 15, 2017)
- Incorporate Partnering Process.
 - Contractor's Critical Path Schedule.
- Letting Date Established. (November 20, 2015)



Kentucky Transportation Cabinet Division of Highway Design TRAFFIC MANAGEMENT PLAN

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Project and Traffic Control Phasing

Phase I

Maintain traffic on existing Manslick Road, Mt. Holly Road, Fairdale Road and Mitchell Hill Road. Construct underground conduit system for electric. telecommunications and entertainment facilities. Construct the following storm sewer structures and interconnecting pipes: ST-5-1 (bottom phase only), ST-5-7, ST-5-8, ST-5-9, ST-5-10, ST-5-11, ST-5-13, ST-7-6, ST-7-7 (bottom phase only), ST-7-8, ST-7-9, ST-7-10, ST-7-11, ST-7-12, ST-13-7, ST-13-9, ST-13-10, ST-13-11, ST-15-1, ST-15-2, ST-15-3, ST-15-4 & ST-15-5. Cover bottom phase of ST-5-1 and ST-7-7 with steel traffic plates. Construct grade, drain, CSB, 3" asphalt base, island and standard header curbs and inside truck apron for roundabout from Sta. 50+00 to Sta. 51+71 and Sta. 52+93 to Sta. 53+77. Construct grade, drain. CSB and 3" asphalt base for phase II diversion roadway. Construct grade, drain. CSB and 3" asphalt base, curb and gutter for new Mitchell Hill Road from Sta. 139+94 to Sta. 141+71 (stop curb and gutter at Sta. 141+46). Construct Mt. Holly Road approach splitter islands. Place signs for Fairdale Road detour route (see detour plan) and all temporary traffic control devices for the phase II diversion bypass.

Temporary traffic signage shall remain in place for the duration of construction or as directed by the Engineer.

Phase II

Maintain traffic on existing Mitchell Hill Road. Divert traffic on Manslick Road and Mt. Holly Road to diversion bypass. Close Fairdale Road approach at Sta. 111+35 for a period not to exceed 15 days. \$15,000/day or \$1,000/hour will be charged to the contractor for every day (hour) that Fairdale Road remains closed beyond this period. Access to Parcels 2 and 6 shall be maintained off of Fairdale Road during this phase. Construct the following storm sewer structures and interconnecting pipes: ST-5-1 (top phase), ST-5-2, ST-5-3, ST-5-4, ST-5-5, ST-5-6, ST-7-1, ST-7-2, ST-7-3, ST-7-4, ST-7-5, ST-9-1, ST-9-2, ST-9-3 & ST-9-4. Construct grade, drain, CSB, 3" asphalt base, island and standard header curbs and inside truck apron for the roundabout from Sta. 51+71 to Sta. 52+93. Construct grade, drain, CSB, 3" asphalt base, curb and gutter, sidewalk and truck apron for the following locations: Manslick Road left of centerline from Sta. 121+40 to Sta. 123+50; Mt. Holly Road left of centerline from Sta. 150+54 to Sta. 152+19; Fairdale Road from Sta. 110+00 to Sta. 111+35. Construct Manslick Road and Fairdale Road approach splitter islands. Place all temporary or permanent traffic control devices and signs for traffic to use the completed roundabout during the remaining portion of the project.

Phase III

Maintain traffic on existing Mitchell Hill Road. Reopen Fairdale Road approach to traffic and maintain traffic on Manslick Road and Mt. Holly Road using



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roundabout. Construct storm sewer structure ST-5-12 with its outlet pipe and top phase for ST-7-7. Construct curb and gutter and truck apron for Manslick Road right of centerline from Sta. 121+34 to Sta. 123+01. Construct curb and gutter for Mt. Holly Road right of centerline from Sta. 150+00 to Sta. 151+34. Construct Mitchell Hill Road splitter islands. Construct remaining curb and gutter and truck apron for new Mitchell Hill Road from Sta. 141+46 to 141+98. Construct 3 1/2" and 3 1/4" asphalt base courses for the roundabout and approaches of Manslick Road, Mt. Holly Road, Fairdale Road and new Mitchell Hill Road while maintaining traffic with flagmen.

• Phase IV

Construct remaining storm sewer structures and interconnecting pipes for Mitchell Hill Road. Construct grade, drain, CSB and 3" asphalt base from Sta. 136+94 to Sta. 139+94. Wedge pavement under traffic. Shift traffic to new Mitchell Hill Road pavement and roundabout. Construct curb and gutter left of Mitchell Hill Road centerline from Sta. 136+94 to Sta. 139+94. Maintain access to Parcel 13 and Parcel 14 from old Mitchell Hill Road.

Phase IV-A

Construct curb and gutter right of Mitchell Hill Road centerline from Sta. 138+36 to Sta. 139+94. Construct 3 1/2" and 3 1/4" asphalt base and concrete entrance to fire department from Sta. 138+36 to Sta. 139+94. Maintain fire department access between Sta. 137+60 and Sta. 138+36.

Phase IV-B

Shift fire department access to between Sta. 138+36 and Sta. 139+70. Construct curb and gutter right of Mitchell Hill Road centerline from Sta. 137+44 to Sta. 138+36. Construct 3 1/2" and 3 1/4" asphalt base and concrete entrance to fire department from Sta. 137+44 to Sta. 138+36.

Phase V

Construct guardrail on old Mitchell Hill Road at Sta. 59+89. Construct remaining standard header curb on Manslick Road right of centerline from Sta. 120+00 to 120+94. Construct sidewalk and curb and gutter for old Mitchell Hill Road from Sta. 61+28 to Sta. 62+43 left of centerline and Sta. 62+23 to Sta. 62+35 right of centerline. Construct all remaining sidewalks, multi-use path and final pavement surfacing for the roundabout and all approaches under traffic. Install all final signing, striping/pavement markings and roadway lighting.



KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES

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RIGHT OF WAY CERTIFICATION

William I was a second	The same of the sa		and the latest l		and the same of th			No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street,	
ITEN	COUNTY	COUNTY			PROJECT #		FEDERAL PRO	JECT#	
5-8501 Jefferson				12FO 056 FD52 8886101R STPM 8754 (006)					
PROJECT DESCR	Fairdale Road / Manslick Road (I	KY 20)55) / Mi 	tchell	Hill Road / Mou	nt Hol	lly Road (KY 2055) Inte	ersection	
The same					AY REQUIRED			pre-	
	be within the limits of the existing right of								
	the Uniform Relocation Assistance and Felocation assistance were required for thi			Acqui	sitions Policy Ac	t of 19	970, as amended. No	additional	
	ADDITIONAL RÍGI	HT O	F WAY I	REQU	IRED AND CLEA	ARED			
TOTAL NUMBER (OF PARCELS ON PROJECT				LI CONTRACTOR	MPRO	VEMENTS		
NUMBER OF PAR	CELS THAT HAVE BEEN ACQUIRED BY:			There were no improvements within the re				quired right	
Signed Deed	100000000000000000000000000000000000000			of way					
Condemnation					All improvement	he required			
Signed Right of En	itry Agreement	-118	100	⊔ ŀ	right of way				
RELOCATION ASS	ISTANCE			_	improvements are currently being remove		rently being removed	ved and it is	
Relocation Assistance was not required for this project]		anticipated that right of way will be cleared prior to the letting date				
All parties have been relocated in accordance with FHWA regulations			3 1		Improvement removal will be included in the construction contract			e	
XI	ADDITIONAL RIGHT	OF	WAY RE	_			N I Washington		
TOTAL NUMBER	OF PARCELS ON PROJECT						20		
Number of parcel	s acquired by Deed, Condemnation or Sig	gned	Right of	Entry	Agreement		16		
EXCEPTION(S)	ANTICIPATED DATE OF POSSESSION		III W W		IMPRO	VEM	ENTS		
P4	12/2015	\Box	There v	There were no improvements within the required right of way					
	22/2013	片	_	All improvements have been removed from the required right of					
P5	06/2016	$ \sqcup$	way						
P6	12/2015			Improvements are currently being removed and it is anticipated					
P8		1-	_	that right of way will be cleared prior to the letting date Improvement removal will be included in the construction contract					
RELOCATION ASS	11/21/2015	ш	hilbios	CITICIT	t remover wan be	·	MED IN the CONSTRUCTO	III CUIRI act	
	nce was not required for this project	10.00		-					
								1 4	
	een relocated in accordance with FHWA i					- 1			
courts, would exp	 P4 has signed right of entry agreement ect master commissioners deed next year rcel 8 has signed a deed expect closing was 	ır. P6	has a sig	gned r	thin 45 days. P5 ight of entry agr	has I(eemei	OJ (right of entry) thro nt, still negotiating	ough the	
Improvments on f	Parcel 5 are in process of being removed	inc. L	JSTs whi	ch ma	y take additiona	l time.	. P3 is cleared of impr	ovements	
LPA				Right of Way Director					
Printed Name				ited Na		211	Ney		
Signature		- 11	Si	enatur	(4)	140	Mess La		
Date				Date	101	22	115		
Printed Name Torn Buck 10			Dele	ited Na	me I	FH	WA	70.750	
Signature	Tom Righting			gnatur		No S	gnature Required		
Date	10/1/15/		1	Date		03 p	er FHWA - KYTC	are the second	
	17-7-7-7	- 20			201	2 216	wardship Agreeme	nt	

JEFFERSON COUNTY, STP 8754 (007) FD52 056 88861 01U CONSTRUCT ROUNDABOUT ON WEST MANSLICK ROAD (KY 2055) AT INTERSECTION OF FAIRDALE RD/MITCHELL HILL ROAD ITEM NO. 5-8501 .00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Utility coordination efforts determined that significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

Louisville Water Company, Metropolitan Sewer District, LG&E-Electric, LG&E-Gas, AT&T-KY, Time Warner, and Windstream have facilities that are within the project area. Please see the notes below pertaining to their locations and relocations.

LG&E- Gas – has an existing 8" gas line on the south side of Manslick Road from a point outside of project limits to the intersection where it changes to a 4" line on Mt Holly Road from a point outside of project limits. An existing 8" medium pressure line from the intersection north up Fairdale Road on the north side of Fairdale Road to a point outside the project limits. An existing 4" line from the intersection of Manslick Road and Old Mitchell Hill Road continues on the east side of Old Mitchell Hill Road to a point outside of the project limits.

These facilities will be removed or relocated by LG&E or their contractors.

Metropolitan Sewer District- Has an existing 8" CIP sewer running on the north side in the pavement of Manslick Road from a manhole at Sta. 117+73 Lt 6' to a manhole (San. MH #4) Sta. 120+90 Lt 8' to a manhole at Fairdale Road Sta. 110+22 Lt. 24.

An existing 4" sanitary sewer running on the south side of Manslick Road from beyond the project limits to an existing manhole at Sta. 119+19 Rt 32' to a manhole (San. MH #3) Sta. 120+90Rt. 20'. From this manhole, the sewer turns south to Old Mitchell Hill Road to a manhole at Sta. 59+95 Lt. 10'.

Has an existing 8" sanitary sewer from manhole (San. MH #9) at Sta. 138+93 Lt. 22' to beyond the project limits.

Has an existing 8" sewer running on the north side of Mt. Holly Road from a manhole (San. MH #11) at Sta. 150+64 Lt 68' to a manhole (San. MH #12) at Sta. 152+49 Lt 28' and continues beyond the project limits.

Has an existing 8" sewer in the middle of Fairdale Road from a manhole at Sta. 110+22 Lt 24' to a manhole (San. MH #6) at Sta. 111+59 Lt 7' where the line turns to a manhole (San. MH #7) at Sta. 112+06 Lt 23' and the sewer continues beyond the project limits.

Has an existing 8" sanitary sewer running from a manhole (San. MH #5) Sta. 111+00 Lt 7' on Fairdale Road and connects to a manhole on Mt Holly Road (San. MH #11) at Sta. 150+64 Lt 68'.

These facilities are not to be disturbed and will remain in place.

The Contractor is fully responsible for protection of all utilities listed above

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CONSTRUCT ROUNDABOUT ON WEST MANSLICK ROAD (KY 2055)

AT INTERSECTION OF FAIRDALE RD/MITCHELL HILL ROAD

ITEM NO. 5-8501 .00

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

LG&E- Gas – has a proposed 8" medium pressure line on Manslick Road that will tie-in to an existing 8" line at Sta. 119+55 Rt 9' and will cross Manslick Road at this location. From Sta. 119+55 Lt 22' the proposed 8" turns 90° and heads to Sta. 120+44 Lt 41' and continues to Sta. 123+00 Lt 49' and turns 90° and heads north up Fairdale Road. From Sta. 110+66 Lt 55' the proposed 8" medium pressure main runs approximately 3' off of the easement and turns 90° at Sta. 111+44 Lt 36' and crosses under Fairdale Road to Sta. 111+39 Rt 42'. From Sta. 111+39 Rt 42' it turns 90° and heads south down Fairdale Road approximately 3' off the easement at Sta. 110+53 Rt 51' the 8" medium pressure line turns east and is on the north side of Mt Holly Road at approximately 3' off the easements. Along Mt Holly Road the 8" medium pressure main is approximately 3' off the easements and turns at Sta. 152+91 Lt 41' to cross under Mt. Holly Road and ties in to the existing 4" gas main at Sta. 152+92 Rt 22'.

A proposed 4 medium pressure line will tie into the proposed 8" medium pressure line at the intersection of Manslick Road and Old Mitchell Hill Road at Sta. 120+65 Lt 41' and crosses under Manslick Road at this location and continues on the east side of Old Mitchell Hill Road at approximately 3' off the easement. At Sta. 61+21 Lt 25' the 4" medium pressure main turns 90° to the west to Sta. 61+21 Lt 45' and turns 90° and heads south down Old Mitchell Hill Road at approximately 3' off the easement and turns 90° at Sta 136+30 Lt 17' to cross Old Mitchell Hill Road then ties into an existing 4" main at Sta. 136+30 Rt 16'. This work is anticipated to be completed by August 30, 2016.

LG&E, AT&T KY, Time Warner Cable and Windstream share some of the same pole routes. The road contractor shall be aware that there are a number of LG&E poles that shall remain. Existing poles will be removed once <u>all</u> facilities have been transferred to the underground conduit. **This work is anticipated to be completed 10 months after the conduit has been installed.**

The Department will consider submission of a bid as the Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of LG&E (Electric), LG&E (Gas), AT&T KY, Time Warner Communications, and Windstream. Working days will not be charged for those days on which work on LG&E (Electric), LG&E (Gas), AT&T KY, Time Warner Communications, and Windstream facilities is delayed, as provided in the current edition of the KY Standard Specifications for Road and Bridge Construction. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to the project, the KYTC Resident Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

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CONSTRUCT ROUNDABOUT ON WEST MANSLICK ROAD (KY 2055)

AT INTERSECTION OF FAIRDALE RD/MITCHELL HILL ROAD

ITEM NO. 5-8501 .00

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

Metropolitan Sewer District- Has an existing sewer on the Manslick Road and Fairdale Road legs of the intersection that will require removal. As part of the roadway project the exiting sewer will be removed and be replaced by the contractor as part of the roadway project as shown on the relocation plans. A proposed manhole at Sta. 110+ 80 Lt. 12' on Fairdale Road will be placed and a proposed 8" sewer line will be placed to a proposed manhole at Sta. 123+23 Lt 7'.

See the plans, specifications and special notes concerning the relocations.

Louisville Water Company – has an existing 8" and 6" asbestos cement (AC) water main that runs along the north side of Manslick Road (KY 2055). The existing 8" AC water main begins at project limits at approximately Sta. 119+63 Lt 12' and runs approximately parallel to existing Manslick Road to a "T" intersection at Fairdale Road. From this T intersection a 6" AC water main continues along Manslick road to Sta. 153+00 Lt 12' and continues out of project limits. From the "T" intersection at Fairdale road a 12" water main runs NE along existing Fairdale Road at approximately 8' Rt offset and continues out of the project limits.

A 6" AC water main runs along the west side of Old Mitchell Hill Road entering the project area at approximately Sta. 136+92 Lt 13'. This 6" AC water main continues north approximately parallel to Old Mitchell Hill Road to Manslick Road Sta. 120+77 Lt 13' where it ties into the existing 8" AC water main described above.

The Contractor will coordinate with KYTC Environmental Department who will oversee the removal of the existing 8" AC water main and 6" AC water main.

As part of the roadway contract the existing main will be replaced by the Contractor with a new ductile iron (DI) water main as shown on the relocation plans. As part of an adjacent KYTC project along Manslick road, just west of the roundabout project, the 8" AC water main is to be replaced with a 12" DI water main; if the adjacent project is complete the contractor will tie a proposed 12" water main into the 12" water main of the adjacent project, if the adjacent project is not complete the contractor will tie into the existing 8" AC water main. The tie-in will be at approximately Sta. 119+63. From the tie-in point the proposed 12" water main runs approximately parallel to Manslick Road at approximately 18ft – 19ft Lt offset of existing Manslick Road to Sta. 152+89 Lt 19', to a set of 45° bends and ties into the existing 6" AC water main at approximately Sta. 153+00 Lt 12'.

A proposed 12" DI water main ties into the above described proposed 12" water main at approximately proposed Fairdale Road Sta. 110+29 Rt 10', then runs parallel to Fairdale Road for approximately 18 ft. to a 45° bend, then runs North to approximately Sta. 111+70 Rt 2' where it ties into the existing 12" water main.

Along Mitchell Hill Road a proposed 12" DI water main ties into the existing 6" AC water main at approximately Sta. 136+92 Lt 13'. This proposed water main runs approximately 20ft – 25ft Lt offset

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along Mitchell Hill Road to a "T" intersection at approximately 139+45 Rt 18'. From this intersection a proposed 6" DI goes south to a proposed meter at approximately Sta. 139+38 Rt 38'. From the intersection at Sta 139+45 the proposed 12" water main continues along Mitchell Hill Road to another intersection at Sta. 139+54 Rt 17'. From this intersection a 12" DI water main continues along Mitchell Hill Road to a 22.5° bend at approximately Sta. 141+25 Lt 17', then runs NE and ties into the proposed 12" water main along Manslick Road at approximately Manslick Road Sta. 122+97 Lt 19'.

From the intersection at Sta 139+54 Rt 17' a proposed 4" DI water main runs approximately 32ft north to a 45° bend at approximately Old Mitchell Hill Road Sta. 60+02 Rt 20', then continues approximately parallel to Old Mitchell Hill Road to a 11.25° bend at Sta. 62+25 Rt 19', then crosses under Manslick road and ties into the proposed 12" DI water main at approximately Manslick Road Sta 121+30 Lt 19'.

A proposed fire hydrant will be installed at approximately Manslick Road Sta. 123+13 Lt 26', tying into the proposed 12" DI water main.

A proposed fire hydrant will be installed at approximately Mitchell Hill Road Sta. 139+63 Lt 34' tying into the 12" DI water main.

See the plans, specifications, and special notes concerning the relocations.

LG&E-Electric – New underground facilities will be placed by the roadway contactor as shown on the relocation plans. On Manslick Road 2-6" conduit will run from a pole at Sta. 119+23 24Lt and will continue to a manhole at Sta. 119+88 Lt 33'. From the manhole 3-6" conduit will continue to another manhole at Sta. 121+08 Lt 34'. From the manhole 3-6" conduit will continue to a manhole at Sta. 122+90 Lt 37'. From the manhole 3-6" conduit will cross under Fairdale Road at Sta. 110+50 and continue to manhole at Sta. 110+43 Rt 35'. On Fairdale Road from manhole at Sta. 110+43 Rt 35' a 1-2" conduit will continue to a utility pole at Sta. 111+24 Rt 15.

On Old Mitchell Hill Road from a transformer at Sta. 61+26 Lt 36 a X-x" conduit will run to a manhole at Sta. 60+88 Lt 37' a X-x" conduit will continue from the manhole and cross under Old Mitchell Hill Road at Sta. 60+83 and will continue to a manhole at Sta. 60+82 Rt 39' and will continue to a manhole at Sta. 140+13 Rt 46 on Mitchell Hill Road.

On Mitchell Hill Road from a utility pole at Sta. 137+46 Rt 18' 2-6" conduit will continue to a manhole at Sta. 137+74 Rt 36' and continue to a manhole at Sta. 140+13 Rt 46. From the manhole 3-6" conduit will continue to another manhole on Mt Holly Road at Sta. 150+08 Rt 45'. From the manhole 3-6" conduit will to a manhole on Mt Holly Road a Sta. 152+58 Rt 38. From the manhole 2-6" conduit will continue to a utility pole at Sta. 152+40 Rt 22 where it terminates.

From manhole at Sta. 150+08 Rt 45' on Mt Holly Road a 3-6" conduit crosses the intersection and connects to a manhole at Sta. 110+50 Rt 35' on Fairdale Road.

Once the underground conduit system has been installed approximate 7 months will be needed for LG&E-electric to relocate their facilities from overhead to underground.

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AT&T-KY -

New underground facilities will be placed by the roadway contactor as shown on the relocation plans. On Manslick Road 6-4" conduit will be placed crossing Manslick Road at Sta. 119+45 to a manhole (MH4) at Sta. 119+45 Lt. 60'. From MH4 6-4" conduit will be placed to an 11 ¼° bend at Sta. 121+06 Lt 25.9' and continue to manhole (MH3) on Mt. Holly Road at Sta. 150+46 Lt. 80'. From MH3 9-4" conduit will be placed on the north side of Mt Holly Rd to a manhole (MH-2) at Sta. 152+80 Lt 35'. From MH2 a 9-4" conduit will cross Mt. Holly Rd at Sta. 152+46 and will continue to manhole (MH1) at Sta. 152+85 Rt. 38'. From MH 1 a 6-4" conduit will run to an existing utility pole at Sta. 153+71 Rt 20' where the conduit will terminate.

On Mitchell Hill Road from a pole at Sta. 137+38 Rt 16' a 6-4" conduit will run to a proposed manhole (MH5) at Sta. 136+41 Rt 38'. From MH5 6-4" conduit will run to a 11 ¼° bend at Sta. 138+37 Rt 37' and continue to a 11 ¼° bend at Sta. 139+50 Rt 49' and continue to a 22 ½° bend at Sta. 140+50 Rt 49' and continue to a 11 ¼° bend at Sta. 142+14 Rt 57' and continue to a 22 ½° bend at Sta. 142+31 Rt 61' and continues to a 11 ¾° bend at Sta. 150+78 Rt 48' and continues to a manhole (MH1) on Mt. Holly Rd at Sta. 152+85 Rt 38'. From MH 1 a 6-4" conduit will run to an existing utility pole at Sta. 153+71 Rt 20' where the conduit will terminate.

On Fairdale Road MH3 a 6-4" conduit will run from the proposed MH3 on the east side of Fairdale Rd to a 11 ¼° bend at Sta. 112+04 Rt 46' and will split into 2 conduit runs. From the split at Sta. 112+04 Rt 46' a 2-4" run will continue on Fairdale Rd to a 11 ¼° bend at Sta. 112+63 Rt 46' then continued to a 11 ¼° bend at Sta. 112+97 Rt 39' and continue to a 11 ¼° bend at Sta. 113+24 Rt 28' and continues to an existing pole at Sta 113+41 Rt 16' where the conduit will terminate. From the split at Sta. 112+04 Rt 46' a 4-4" conduit will continue on Fairdale Rd to a 11 ¼° bend at Sta. 112+38 Rt 40' and continue to a 11 ¼° bend at Sta. 112+82 Rt 17' where the conduit will terminate.

Once the underground conduit system has been installed approximate 10 months will be needed for AT&T-KY to relocate their facilities from overhead to underground.

Time Warner-

New underground facilities will be placed by the roadway contract as shown on the relocation plans. On Manslick Road from an existing pole at Sta. 114+78 Rt 13' a 2-4" conduit will run to a 22 % bend at Sta. 118+83 Rt 8' and continue to a 22 % bend at Sta. 118+90 Rt 5' and continue to a series of 4-22 % bend at the corner of Old Mitchell Hill Road and Manslick Road and continues to a 22 % bend at Sta. 62+05 Lt 10' and continues to a 22 % bend at Sta. 60+60 Lt 5' and continues to a 22 % bend at Sta. 60+50 Lt 10' and continues to a pole at Sta. 60+22 Lt 39' where the conduit will terminate.

On Manslick Road from an existing pole at Sta. 119+45 Rt 13' a 2-4" conduit will run to a 22 %° bend at Sta. 119+45 Lt 14' and continues to a 22 %° bend at Sta. 119+45 Lt 18' and continues to a 22 %° bend at Sta. 119+50 Lt 22' and continues to a 22 %° bend at Sta. 119+60 Lt 26' and continues to a 22 %° bend at

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Sta.120+13 Lt 27' and continues to a and continues to a 11 ¼° bend at Sta.120+13 Lt 27' to pull box 3 and continues to a 11 ¼° bend at Sta.120+40 Lt 27' and continues to a and continues to a 11 ¼° bend at Sta.121+00 Lt 26' and continues to 2- 22 ½° bends at Sta. 150+42 Lt 70' on Mt Holly Road and continues to 3 - 22 ½° bends at Sta.150+60 Lt 90' and continues to 2-22 ½° bends at Sta.152+70 Lt 37' and crosses Mt Holly Road at Sta. 152+85 and continues to pull box 1 at Sta. 152+87 Rt 27'.

On Mitchell Hill Road from an existing pole at Sta. 136+38 Rt 16' a 2-4" conduit will run to 22 ½° bend at Sta.136+52 Rt 30' and continues to 2- 22 ½° bends at Sta.136+ 70 Rt 37' and continues to pull box 5 at Sta. 137+30 Rt 33' and continues to a 11 ½° bend at Sta.139+ 25 Rt 47' continues to a 11 ½° bend at Sta. 139+50 Rt 48' and continues to a 22 ½° bend at Sta.140+20 Rt 49' and continues to pull box 4 at Sta. 142+31 Rt 61' and continues to a 11 ½° bend at Sta.150+78 Rt 48' and continues to pull box 1 at Sta. 152+87 Rt 27'. From pull box 1 2-4" conduit continues to a utility pole at Sta. 153+71 Rt 20' where the conduit will terminate.

On Fairdale Road from pull box 2 a 2-4" conduit will run from pull box 2 on the east side of Fairdale Road to a series of 11 %° and 22 %° bends and continues to a 11 %° bend at Sta.112+63 Rt 46' continues to a 11 %° bend at Sta. 112+97 Rt 39' continues to a 11 %° bend at Sta. 113+24 Rt 28' and continues to an existing pole at Sta. 113+41 Rt 16' where the conduit will terminate

On Fairdale Road MH3 a 6-4" conduit will run from the proposed MH3 on the east side of Fairdale Rd to a 11 % bend at Sta. 113+23 Rt 27'.

Once the underground conduit system has been installed approximate 3 months will be needed for Time Warner to relocate their facilities from overhead to underground.

Windstream -

New underground facilities will be placed by the roadway contactor as shown on the relocation plans. On Manslick Road from an existing pole at Sta 119+85 Rt 13' a 1-3" conduit will be placed crossing Manslick at Sta. 119+86 and will run on the north side of Manslick Road and continues across the intersection and connects to a hand hole at Sta. 110+46 Rt 27'.

From the hand hole at Sta 110+46 Rt 27' 1-3" conduit will be placed on the south side of Fairdale Road and continue to a pole at Sta. 111+24 Rt 15' where the conduit will terminate.

On Mt Holly Road from an existing pole at Sta. 152+60 Rt 20' a 1-3" conduit will be placed on the south side of Mt Holly Road and connects to a hand hole at Sta. 150+48 Rt 58.' The conduit will turn north from the hand hole and cross the intersection and connect to a hand hole at Sta. 150+23 Lt 89'.

Once the underground conduit system has been installed approximate 3 months will be needed for Windstream to relocate their facilities from overhead to underground.

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involved

Minimal Rail Involved (See Below)

Rail Involved (See Below)

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SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

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AREA UTILITIES CONTACT LIST

AREA OTHER ESCONTACT LIST				
<u>Uti</u>	lity Company/Agency	Contact Name	Contact Information	
1.	LG&E KU (Electric) 820 West Broadway Louisville, KY 40202 LG&E Emergency Number (502) 589 LG&E and KU Emergency Number 1		Greg Geiser work: (502) 627-3708 Greg.Geiser@LGE-KU.com	
2.	LG&E (Gas) 820 West Broadway Louisville, KY 40202 Gas Emergency Number (502) 589- LG&E and KU Emergency Number 1		Greg Geiser work: (502) 627-3708 Greg.Geiser@LGE-KU.com	
3.	Louisville Water Company 550 South Third Street Louisville, KY 40202		Daniel Tegene, PE (502) 569-3649 DTegene@LWCky.com	
4.	AT&T KY 3719 Bardstown Road - 2nd Floor Louisville, KY 40218		Morgan Herndon <u>mh0831@att.com</u> (502) 458-7312	
5.	Metropolitan Sewer District 700 West Liberty Street Louisville, KY 40203-1911		Brandon Flaherty <u>Brandon.Flaherty@LouisvilleMSD.org</u> Office: (502) 540-6632 Cell: (502) 381-0804	
			Greg Powell Greg.Powell@LouisvilleMSD.org	
6.	Time Warner Cable Company 10168 Linn Station Road Suite 120 Louisville, KY 40223		Deno Barbour Cell: (502) 664-7395 Office: (502) 357-4376 Dwight.Barbour@TWCable.com	
7.	Texas Gas Transmission Corporation 10327 Gaslight Way Louisville, KY 40299	1	John Weaver (502) 438-2407 John.Weaver@BWPMLP.com Howard Menser	

Howard.Menser@BWPMLP.com

Office: (502)491-0251 Cell: (502)396-2418

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8. Marathon Pipeline, LLC 539 S Main St, Rm 7642 Findlay, OH 45840

Indiana Gas Company Inc
 d.b.a. Vectren Energy Delivery of Indiana, Inc

or

Ohio River Pipeline Corporation

2520 Lincoln Drive

Clarksville, Indiana 47129

Line Maintained By

Texas Gas Transmission, LLC 3800 Frederica Street Owensboro, Kentucky 42302

Cell: (270) 485-1152

10. Indiana Utilities Corporation 123 West Chestnut Street Corydon, Indiana 47112 (812) 738-3235

11. Sprint - Fiber Optics 11370 Enterprise Park Dr. Sharonville, OH 45241

12. Mid-Valley Pipeline Company 4910 Limaburg Road Burlington, KY 41005 FAX (866) 699-1185

13. 1025 Eldorado BoulevardSuite 43C-420Broomfield, Colorado 80021

Louisville. KY 40209

Jefferson County Public Schools (JCPS)C B YoungBuilding 73001 Crittenden Dr.

Greg Newman gcnewman@mara

gcnewman@marathonpetroleum.com

(419)884-0800x236

Mary Barber

MBarber@Vectren.com

(812) 948-4952

Kevin Kinney
Ron Timberlake
Jackie Rogers
JackieR@IndianaUtilitiesCorp.com

Joe Thomas

Joeseph.J.Thomas@sprint.com Office (513) 612-4204

Cell (937) 209-9754

Todd Calfee (Richard) (859) 371-4469x14 (859) 630-8271

RTCALFEE@SunocoLogistics.com

Tim Boykin Project Manager,

Relocations-Southeast Region

Office (720)888-7280 <u>Tim.Boykin@Level3.com</u> Fax (720)567-3262

Jeff Hardy

Jeff.Hardy@Jefferson.kyschools.us

(502)485-7975

Scott McMahan (Team Fishel)

cell: (502)664-9312 office: (502)456-2900

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15. Kentucky Data Link (KDL now Windstream) James Galvin

> **Project Manager** 111 S. Main St.

Elizabethtown, KY 42701

Office: (270) 765-1818 Cell: (TBD)

Email – james.galvin@windstream.com

Bruce Babbit (Senior Engineer)

Office: (270) 765-1803 Cell: (502) 727-3897

16. AT&T Legacy

7555 E. Pleasant Valley Rd. – Suite 140

Independence, OH 44131

Mike Diederich

MD4145@att.com

PHONE - (216) 750.0135 CELL - (216) 212-8556

Don Garr

DRGarr@Hughes.net Cell: (502) 741-8374

17. TWTelecom (now Level3 Comm.) 11857 Commonwealth Drive

Louisville, KY 40299

333 West Vine Street, Suite 330

Lexington, KY 40507

Harold Waters

harold.waters@level3.com

(502) 435-0956

Gerald Long

Gerald.Long@TWTelecom.com

(859) 550-2201

18. City of Taylorsville Sewer & Water 70 Taylorsville Rd., P O Box 279

Taylorsville, KY 40071

Harold Compton

HCompton@TaylorsvilleWater.org

(502) 477-3235 Fax: (502) 477-1310

19. Qwest Communications Company, LLC

> 700 W Mineral Ave, UTD2734 Littleton, Colorado 80120

George McElvain

George.McElvain@Qwest.com

(303) 992-9931 Cell:720-260-2514 Fax:303-707-3252

20. Shelby Energy Cooperative

P.O. Box 311, 620 Old Finchville Road

Shelbyville, KY 40065

(502) 633-4420

Jason Ginn

Jason@ShelbyEnergy.com

cell: (502) 643-2778

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21. **Atmos Energy** 105 Hudson Blvd Shelbyville, KY 40065

(502) 633-2831 ext. 104

22. **Crown Castle Network Operations** 10170 Linn Station Road

Suite 525

Louisville, KY 40223

23. Zayo

701 W. Henry Street

Suite 201

Indianapolis, IN 46225

24. MCI/Verizon(Owns WUTEL)

MCI/Verizon

730 West Henry Street Indianapolis, IN 46225

Bernie Anderson cell: (502) 321-8073

Bernie.Anderson@AtmosEnergy.com

OR

Ryne White

Ryne.white@atmosenergy.com

270-929-1706

Brian Watkins

Brian.Watkins@CrownCastle.com

(502) 318-1323 Cindy Shaffer

Cynthia.Shaffer@CrownCastle.com

(502) 318-1313 Chris Gladstone

Chris.Gladstone@CrownCastle.com

(502)689-2162

Bill Hales

Bill.Hales@zayo.com (502) 500-3661

Chris Fowler

Chris.Fowler@Verizon.com Office: (317) 685-8050 Cell: (317) 435-6225

Dave Wiley (Field) (502) 439-8783

Dave.Wiley@One.Verizon.com

25. **TRIMARC**

Public Safety & Transportation Systems

901 West Main Street Louisville, Kentucky 40202 Todd Hood

Todd.Hood@ngc.com

Office: (502)587-6624 ext. 2

Cell: (502)307-7456

GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT

5-8501.00 / FD52 056 2055 001-002

The contractor should be aware the following utility notes and Standard KYTC Utility Bid Item Descriptions shall supersede, replace and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

PROTECTION OF EXISTING UTILITIES

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

PREQUALIFIED UTILITY CONTRACTORS

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. Those utility owners with a prequalification or preapproval requirement are as follows:

LWCo-Requires LWC pre-qualified contractor in category 1 and 4 for this project

MSD- Does <u>not</u> require pre-qualified contractor for this project

LG&E-electric- Does <u>not</u> require pre-qualified contractor for this project

Windstream- Does <u>not</u> require pre-qualified contractor for this project

AT&T-KY- Does <u>not</u> require pre-qualified contractor for this project

Time Warner- Does <u>not</u> require pre-qualified contractor for this project

The bidding contractor needs to review the above list and look for a list of preapproved or prequalified contractors at the end of these general notes as identified above before bidding. Only contractors shown

to be prequalified or preapproved by the utility owner on the following list(s) will be allowed to work on that utility as a part of this contract.

Any utility contractor that is not listed as prequalified or preapproved when the project is advertised for bid and wishes to be added must make request through the KYTC Contract Procurement website. The request should be made at least one week prior to the bidding deadline to allow for review and posting on the KYTC Contract Procurement website. A contractor is only considered prequalified or preapproved when published on the KYTC Contract Procurement website. Contractors that contact the utility owner directly for preapproval or prequalification without contacting KYTC will not be considered for preapproval or prequalification for this contract. Contractors that are not prequalified or preapproved through KYTC before the bidding deadline will not be considered for prequalification or preapproval after bidding.

CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

ENGINEER

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word "Inspector" or "Resident Project Representative" appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Inspector" or "Resident Project Representative" is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shut downs are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns. If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so following the rules, procedures and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shut downs is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be; but is not limited to, a door hanger, notice by newspaper ad, telephone contact or any combination of communication methods deemed necessary, customary and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner's shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or

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designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be "in-kind" as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

BELOW ARE NOTES FOR WHEN "INST" ITEMS ARE IN THE CONTRACT MEANING THE UTILITY COMPANY IS PROVIDING CERTAIN MATERIALS FOR UTILITY RELOCATION

MATERIAL

Contrary to Standard Utility Bid Item Descriptions, those bid items that have the text "Inst" at the end of the bid item will have the major components of the bid item provided by the utility owner. No direct payment will be made for the major material component(s) supplied by the utility company. All remaining materials required to construct the bid item as detailed in utility bid item descriptions, in utility specifications and utility plans that are made a part of this contract will be supplied by the contractor. The contractor's bid price should reflect the difference in cost due to the provided materials.

The following utility owners have elected to provide the following materials for work under this contract:

LWCo– will supply fire hydrants and copper pipe for service connections. All other materials are to be supplied by the contractor per bid item descriptions, utility specifications and utility plans.

 $\textbf{MSD-} \ will \ \textbf{NOT} \ be \ supplying \ material \ for \ installation- \ contractor \ to \ supply \ and \ install$

LG&E-electric– will be supplying material for installation

Windstream – will be supplying material for installation

AT&T-KY– will be supplying material for installation

Time Warner— will be supplying material for installation

SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

Standard Water Bid Item Descriptions

W AIR RELEASE VALVE This bid item description shall apply to all air release valve installations of every size except those defined as "Special". This item shall include the air release valve, main to valve connecting line or piping, manhole, vault, structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release valve at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. All air release/vacuum valves on a project shall be paid under one bid item regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release valve would a separate bid item be established. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

BOLLARDS This item is for payment for furnishing and installing protective guard posts at above ground utility installations. A bollard may consist of, but not limited to, a steel post set in concrete or any other substantial post material. This item shall include all labor, equipment, and materials needed for complete installation of the bollard as specified by the utility owner specifications and plans. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: A bid code for this item has been established in standard roadway bid items and shall be used for payment of this item. The bid code is 21341ND

W CAP EXISTING MAIN This item shall include the specified cap, concrete blocking and/or mechanical anchoring, labor, equipment, excavation, backfill, and restoration required to install the cap at the location shown on the plans or as directed in accordance with the specifications. This item is not to be paid on new main installations. This pay item is only to be paid to cap existing mains. Caps on new mains are incidental to the new main. Any and all caps on existing mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of water main under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT CONCRETE Includes all labor, equipment, excavation, concrete, reinforcing steel, backfill, restoration, and etc., to construct the concrete encasement of the water main as shown on the plans, and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasement shall be paid under one bid item included in the contract regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches

Range 2 = All encasement sizes greater than 6 inches to and including 10 inches

Range 3 = All encasement sizes greater than 10 inches to and including 14 inches

Range 4 = All encasement sizes greater than 14 inches to and including 18 inches

Range 5 = All encasement sizes greater than 18 inches to and including 24 inches

Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASEMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open cut and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches

Range 2 = All encasement sizes greater than 6 inches to and including 10 inches

Range 3 = All encasement sizes greater than 10 inches to and including 14 inches

Range 4 = All encasement sizes greater than 14 inches to and including 18 inches

Range 5 = All encasement sizes greater than 18 inches to and including 24 inches

Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W FIRE HYDRANT ADJUST Includes all labor, equipment, excavation, materials, and backfill to adjust the existing fire hydrant using the fire hydrant manufacturer's extension kit for adjustments of 18" or less. Adjustments greater than 18" require anchoring couplings and vertical bends to adjust to grade. The Contractor will supply and install all anchor couplings, bends, fire hydrant extension, concrete blocking, restoration, granular drainage material, etc, needed to adjust the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. This also includes allowing for the utility owner inspector to inspect the existing fire hydrant prior to adjusting, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete and ready for use.

W FIRE HYDRANT ASSEMBLY Includes all labor, equipment, new fire hydrant, isolating valve and valve box, concrete pad around valve box (when specified in specifications or plans), piping, anchoring tee, anchoring couplings, fire hydrant extension, excavation, concrete blocking, granular drainage material, backfill, and restoration, to install a new fire hydrant assembly as indicated on plans and on standard drawings compete and ready for use. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT RELOCATE This item includes all labor and equipment to remove the existing fire hydrant from its existing location and reinstalling at a new location. This item shall include a new isolating valve and valve box, concrete pad around valve box (when required in specifications or plans), new piping, new anchoring tee, anchoring couplings, fire hydrant extensions, concrete blocking, restoration, granular drainage material, excavation, and backfill as indicated on plans, specifications, and on standard drawings compete and ready for use. This item shall also include allowing for utility owner inspector to inspect the existing fire hydrant prior to reuse, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant for use, if the existing fire hydrant is determined unfit for reuse. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT REMOVE This bid item includes removal of an abandoned fire hydrant, isolating valve, and valve box to the satisfaction of the engineer. The removed fire hydrant, isolating valve and valve box shall become the property of the contractor for his disposal as salvage or scrap. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSH HYDRANT ASSEMBLY This item shall include the flushing hydrant assembly, service line, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the flush hydrant at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSHING ASSEMBLY This item shall include the flushing device assembly, service line, meter box and lid, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the

flushing device at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W LINE MARKER This item is for payment for furnishing and installing a ground level water utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

W MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. This bid item is to be used to relocate an existing water main at point locations such as to clear a conflict at a proposed drainage structure, pipe or any other similar short relocation situation, and where the existing pipe material is to be reused. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specification as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case by case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Water Main Relocate shall not be paid on a linear feet basis; but, shall be Paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER This item is for payment for installation of all standard water meters of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER ADJUST This item includes all labor, equipment, excavation, materials, backfill, restoration, and etc., to adjust the meter casting to finished grade (whatever size exists) at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER RELOCATE This item includes all labor, equipment, excavation, additional fittings, disinfection, testing, restoration, and etc., to relocate the existing water meter (whatever size exists), meter yoke, meter box, casting, and etc., from its old location to the location shown on the plans or as directed, in accordance with the specifications and standard drawings complete and ready for use. The new service pipe (if required) will be paid under short side or long side service bid items. Any and all meter

relocations of 2 inches or less shall be paid under one bid item included in the contract regardless of size. Each individual relocation shall be paid individually under this item; however, no separate bid items will be established for meter size variations of 2 inches ID or less. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER VAULT SIZE RANGE 1 OR 2 This item is for payment for installation of an underground structure for housing of a larger water meter, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s) valve(s), all piping, and fitting materials associated with installing a functioning meter and vault in accordance with the plans, standard drawings, and specifications, complete and ready for use. The size shall be the measured internal diameter of the meter and piping to be installed. The size meter vault to be paid under size 1 or 2 shall be as follows:

Size Range 1 = All meter and piping sizes greater than 2 inches up to and including 6 inches Size Range 2 = All meter and piping sizes greater than 6 inches

This item shall be paid EACH (EA) when complete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER/FIRE SERVICE COMBO VAULT This item is for payment for installation of an underground structure for housing of a water meter and fire service piping, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s), valve(s), all piping, and fitting materials associated with installing a functioning meter and fire service vault in accordance with the plans and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER WITH PRESSURE REDUCING VALVE (PRV) This item is for payment for installation of all standard water meters with pressure reducing valves (PRV) of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, PRV, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter with PRV in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W PIPE This description shall apply to all PVC, ductile iron, and polyethylene/plastic pipe bid items of every size and type to be used as water main, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specification), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. This item shall also include pipe anchors, at each end of polyethylene pipe runs when

specified to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W PLUG EXISTING MAIN This item shall include the specified plug, concrete blocking and/or anchoring, labor, equipment, excavation, backfill, and restoration required to install the plug in an existing in-service main that is to remain at the location shown on the plans or as directed in accordance with the specifications. Any and all plugs on all existing in-service mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: This utility bid item is not to be paid on new main installations or abandoned mains. This pay item is to plug existing in-service mains only. Plugs on new mains are incidental to the new main just like all other fittings.

NOTE: Plugging of existing abandon mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications For Road And Bridge Construction and paid using Bid Code 01314 Plug Pipe.

W PRESSURE REDUCING VALVE This description shall apply to all pressure reducing valves (PRV) of every size required in the plans and specifications except those bid items defined as "Special". Payment under this description is to be for PRVs being installed with new main. This item includes the PRV as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), pit or vault, backfill, restoration, testing, disinfection, and etc., required to install the specified PRV at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, PRVs shall be restrained. PRV restraint shall be considered incidental to the PRV and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W PUMP STATION This item is for payment for installation of pumps and an above or below ground structure for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) when complete.

W REMOVE TRANSITE (AC) PIPE This item shall include all labor, equipment, and materials needed for removal and disposal of the pipe as hazardous material. All work shall be performed by trained and certified personnel in accordance with all environmental laws and regulations. Any and all transite AC pipe removed shall be paid under one bid item included in the contract regardless

of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W SERVICE LONG SIDE This bid item description shall apply to all service line installations of every size bid up to and including 2 inch inside diameter, except those service bid items defined as "Special". This item includes the specified piping material, main tap, tapping saddle (if required), and corporation stop materials, coupling for connecting the new piping to the surviving existing piping, encasement of 2 inches or less internal diameter (if required by plan or specification), labor, equipment, excavation, backfill, testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service installations where the ends of the service connection are on opposite sides of the public roadway and the service line crosses the centerline of the public roadway as shown on the plans. The length of the service line is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for special bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE SHORT SIDE This bid item description shall apply to all service line installations of every size up to and including 2 inch internal diameter, except those service bid items defined as "Special". This item includes installation of the specified piping material of the size specified on plans, encasement of 2 inches or less internal diameter (if required by plan or specification), main tap, tapping saddle (if required), corporation stop, coupling for connecting the new piping to the surviving existing piping, labor, equipment, excavation, backfill, testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service installations were both ends of the service connection are on the same side of the public roadway, or when an existing service crossing a public roadway will remain and is being extended, reconnected, or relocated with all work on one side of the public roadway centerline as shown on the plans. The length of the service line is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the service crosses a private residential or commercial entrance; but, not a public roadway. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE RELOCATE This item is for the relocation of an existing water service line where a meter is not involved, and where an existing service line can easily be adjusted by excavating alongside and moving the line horizontally and/or vertically a short distance without cutting the service line to avoid conflicts with road construction. This item shall include excavation, labor, equipment, bedding, and

backfill to relocate the line in accordance with the plans and specifications complete and ready for use. Payment under this item shall be for each location requiring relocation. Payment shall be made under this item regardless of service size or relocation length. No separate pay items will be established for size or length variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE ABANDONMENT This item is to be used to pay for abandonment of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., abandonment of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE REMOVAL This item is to be used to pay for removal of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., removal of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TAPPING SLEVE AND VALVE SIZE 1 OR 2 This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready for use in accordance with the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Size 1 = All live tapped main sizes up to and including 8 inches

Size 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TIE-IN This bid description shall be used for all main tie-in bid items of every size except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, disinfection, testing and backfill required to make the water main tie-in as shown on the plans, and in accordance with the specifications complete and ready for use. Pipe for tie-ins shall be paid under separate bid items. This item shall be paid EACH (EA) when complete.

W VALVE This description shall apply to all valves of every size required in the plans and specifications

except those bid items defined as "Special". Payment under this description is to be for gate or butterfly valves being installed with new main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, disinfection, and etc., required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, valves shall be restrained. Valve restraint shall be considered incidental to the valve and adjoining pipe. This description does not apply to cut-in valves. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE ANCHOR EXISTING This bid item is intended to pay for installation of restraint hardware on an existing valve where no restraint exists to hold the valve in place to facilitate tie-ins and other procedures where restraint is prudent. This work shall be performed in accordance with water specifications and plans. This bid item shall include all labor equipment, excavation, materials and backfill to complete restraint of the designated valve, regardless of size, at the location shown on the plans, complete and ready for use. Materials to be provided may include, but is not limited to, retainer glands, lugs, threaded rod, concrete, reinforcing steel or any other material needed to complete the restraint. Should the associated valve box require removal to complete the restraint, the contractor shall reinstall the existing valve box, the cost of which shall be considered incidental to this bid item. No separate bid items are being provided for size variations. All sizes shall be paid under one bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE BOX ADJUST Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, and etc., to adjust the top of the box to finished grade complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE CUT-IN This bid description is for new cut-in valve installations of all sizes where installation is accomplished by cutting out a section of existing main. This item shall include cutting the existing pipe, supplying the specified valve, couplings or sleeves, valve box, concrete pad around valve box (when required in specifications or plans), labor, equipment, and materials to install the valve at the locations shown on the plans, or as directed by the engineer, complete and ready for use. Any pipe required for installation shall be cut from that pipe removed or supplied new by the contractor. No separate payment will be made for pipe required for cut-in valve installation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE VAULT This item is for payment for installation of an underground structure for housing of specific valve(s) as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or doors, the specified valve(s), all piping, and fitting materials associated with installing a functioning valve vault in accordance with the plans, standard drawing, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

SUPPLEMENTARY SPECIFICATIONS

FAIRDALE ROUNDABOUT - WATER MAIN RELOCATION PROJECT LWC PROJECT 14255

PROJECT LIMITS

Limits of the referenced project include: Fairdale Road at Mount Holly Road, Manslick Road from 10703 Manslick Road to Fairdale Road, Mount Holly Road from Fairdale Road to 405 Mount Holly Road, Old Mitchell Hill Road from Manslick Road to Mitchell Hill Road and Mitchell Hill Road from Manslick Road/Mount Holly Road to 10015 Mitchell Hill Road.

PROJECT SUMMARY

The referenced project consists of the supply and installation of $\underline{1,325}$ +/- linear feet of 12-inch Pressure Class 350 ductile iron water main $\underline{60}$ +/- linear feet of 6-inch Pressure Class 350 ductile iron water main and $\underline{310}$ +/- linear feet of 4-inch Pressure Class 350 ductile iron water main including valves, fittings and tie-ins to existing water mains. Also included with this project is the installation of $\underline{2}$ fire hydrants and the transfer, renewal, relocation or discontinue of $\underline{20}$ customer services.

This project is "Supply and Install" and all pipe and fittings shall be supplied by the contractor. All materials supplied by the contractor shall comply with the Buy America requirments. (Fire Hydrants and copper tubing will be supplied by the Louisville Water Company)

SCOPE OF WORK

If there are any conflicts between the water main specification and other agency or utilities specifications regarding design or construction, then the Louisville Water Company current Technical Specifications take precedence.

MATERIALS FURNISHED BY CONTRACTOR

Materials furnished & installed by the CONTRACTOR include but not limited to the following:

- A. 12-inch Pressure Class 350 ductile iron water main
- B. 6-inch Pressure Class 350 ductile iron water main
- C. 4-inch Pressure Class 350 ductile iron water main
- D. 12" Gate Valves (Right-hand open)
- E. 8" Gate Valves (Right-hand open)
- F. 6" Gate Valves (Right-hand open)
- G. 4" Gate Valves (Right-hand open)
- H. 12" Plugs
- I. 8" Plugs
- J. 6" Plugs

- K. 12" 45 degree Bends
- L. 4" 45 degree Bends
- M. 12" 22 ½ degree Bends
- N. 12" 11 ¼ degree Bends
- O. 4" 11 1/84 degree Bends
- P. 12" x 12" Tees
- Q. 12" x 8" Tees
- R. 12" x 6" Tees
- S. 12" x 4" Tees
- T. 12" x 8" Reducers
- U. 12" x 6" Reducers
- V. 12" x 6" anchor tee, 6" Gate Valves (Right-hand open)
- W. Polywrap for all Ductile Iron Pipe
- X. Liquid Chlorine (12.5% Sodium Hypochlorite)
- Y. Concrete, Asphalt, steel reinforcement & anchors, and joint sealer/filler
- Z. All EPSC measures
- AA. Seed and Straw
- BB. Bedding and backfill material

GENERAL INFORMATION

All water main work shall be installed by a Louisville Water Company Prequalified Contractor in the category of 4-inch to 16-inch ductile iron water main. For more information on pre-qualification requirements, contact Procurement Services of the Louisville Water Company at 569-3600.

The Contractor is to supply and install the ductile iron water main and all other water main appurtenances. The pipe and fittings shall be inspected by the LWC Inspector prior to installation and any defective or non-compliant pipe shall immediately be removed from the job site.

Rock shall be removed using mechanical methods (backhoe, hoe ram, or rock trenching machine). Blasting shall not be permitted unless approved by the Kentucky Transportation Cabinet.

GATE VALVES

In accordance with Section 1.1 of the Technical Specifications, existing valves shall be located and inspected by the contractor prior to the start of the project, and appropriate action taken to correct the problem(s) prior to start of the construction work. Except in cases of emergency, the Contractor shall <u>not</u> operate any valve without direct supervision of the LWC Project Manager or Inspector.

TRAFFIC CONTROL

Traffic control shall be provided by the Contractor in accordance with the Kentucky Transportation Cabinet specifications.

WORK SCHEDULE

Work hours shall be per the Kentucky Transportation Cabinet roadway contract documents

The Contractor shall anticipate the need to work on weekends and nights to complete tie-ins and service transfers involving shut-offs. All such work will be considered incidental to the project and no additional compensation will be provided. As with holidays and any work planned for weekends, this shall be pre-approved by the LWC Project Manager and coordinated with the KYTC Resident Engineer.

In the case of an emergency, the Contractor shall immediately notify the LWC Construction Inspector, Radio Room, and Customer Service along with the KYTC Resident Engineer and/or the KYTC Inspector. Prior to the actual shut-off, the contractor shall contact each customer (door-to-door) to alert customers of the emergency situation and the need to shut-off the main.

PIPELINE CONSTRUCTION

Unless otherwise indicated on the project drawings or modified by these supplementary specifications, all applicable provisions of the "Louisville Water Company Technical Specifications and Standard Drawings for Pipeline Construction" (2008 Edition) shall govern work on this project.

Prior to the start of any water main work at the site, the Contractor and the LWC Project Manager, LWC Construction Inspector along with the KYTC Resident Engineer and the KYTC Inspector shall review the proposed pipeline alignment with respect to the locations marked by BUD and other existing site improvements.

Field modifications to the proposed pipeline alignment may be necessary to avoid or minimize the effects of potential conflicts. To avoid potential conflicts with existing utilities located perpendicular and/or parallel to the proposed main, the Contractor shall anticipate the need to use offsets, bends and fittings when installing the new main, and for large service connections. All such alignment change requires LWC Project Manager and KYTC Resident Engineer prior approval.

Standard burial depth for new water mains is 42 inches, as measured from the top of the finished ground to the top of the newly installed pipe. Situations requiring a depth of burial outside the standard will require prior approval from the Louisville Water Company and the KYTC Resident Engineer.

The Contractor is cautioned that OSHA trench safety standards apply to all excavations.

Prior to completing tie-ins, the type, size and condition of the existing pipe shall be verified. When the existing pipe is other than indicated on the Project Plans, the Construction Inspector or LWC Project Manager shall be contacted immediately to assess the need for revising the tie-in location. All revisions are to be coordinated with the KYTC Resident Engineer and/or the KYTC Inspector. The Contractor shall be

compensated in accordance with the supplementary unit prices for any additional pipeline installed to change the tie-in location.

<u>INSPECTIONS</u>

The Contractor shall notify the LWC Project Manager along with the KYTC Resident Engineer and/or the KYTC Inspector at least 48 hours prior to beginning water line work.

TRENCH CONSTRUCTION

Pipeline bedding and initial backfill shall consist of DGA, manufactured sand or pit-run sand; selected, placed, and compacted in accordance with Section 7 of the Technical Specifications.

When under *pavement* (streets, driveways, and entrances), the final backfill material shall consist of DGA or pit-run sand placed to within 9-1/2 inches of the final grade elevation, followed by the placement of an 8-inch concrete cap and a 1-1/2 inch asphalt surface.

When under *sidewalks*, the final backfill may consist of on-site excavated material, provided the material is free of objectionable constituents such as large rock, asphalt, concrete, organic material and demolition debris. This backfill material shall be placed and compacted to the subgrade elevation, followed by the placement of a 6-inch layer of DGA and the concrete sidewalk. The surface of the DGA shall be level and free from surface depressions or potholes, and may serve as a temporary sidewalk until the concrete sidewalk is completed.

When under *grassed areas*, the final backfill may consist of on-site excavated material, provided the material is free of objectionable constituents such as large rock, asphalt, concrete, organic material, and demolition debris.

EROSION PREVENTION SEDIMENT CONTROL MEASURES

An erosion control plan is required by MSD and/or Louisville Metro. An erosion control plan shall be prepared by the contractor and submitted to MSD for review and approval. The contractor is responsible for maintaining all erosion control measures within the project limits in accordance with the latest MSD, Louisville Metro and LWC specifications. The contractor is responsible for making all erosion control modifications within the project limits required by MSD, Louisville Metro and/or LWC at no additional cost to LWC. The contractor is responsible to rectify any disputes that may arise due to inadequate erosion control measures as determined by MSD and/or Louisville Metro.

As a minimum, erosion control features shall be provided at catch basins, headwalls and in small ditches where associated construction procedures may cause the transport of sediment into the storm drainage system. Silt Fence must be installed along the trench per MSD's standards. When soil is disturbed within grassy areas, erosion control protection shall also be provided at yard drains. Care will be required to minimize stockpiling or placing backfill or excavated materials on roadways.

SPECIAL CONSIDERATIONS FOR ASBESTOS-CEMENT PIPE

- A. The project drawings show abandonment of asbestos-cement water main (ACWM). Asbestos fibers are identified as a hazardous material. Pipe cutting or other construction activities that result in the uncontrolled release of asbestos fibers shall be performed only by personnel specially trained and certified in the handling and disposal of asbestos-containing material.
- B. A copy of the LWC Asbestos Cement (AC) Pipe Cutting Procedures is included as an <u>Attachment B</u> to these specifications. These standards shall be followed when AC pipe is cut or when construction activities result in the uncontrolled release of asbestos fibers.
- C. As an alternate to cutting AC pipe, the Contractor may elect to break or unbolt the couplings and remove an entire joint without cutting the pipe. If removed in this manner, an asbestos worker will not be required.
 - Disposal of the pipe, whether cut or unbolted, shall be handled in accordance with the Asbestos Cement (AC) Pipe Cutting Procedure.
- D. The construction crew shall develop a plan for proper disposal of AC pipe removed during the construction activities. A copy of the plan shall be submitted to the Project Manager prior to the start of construction. The plan shall be reviewed and accepted by the Project Manager prior to commencing work on the A.C. water main.
- E. The Contractor shall supply and install insulated No. 10 stranded copper wire to be used as a tracer wire for the abandonment operations. Two wires shall be fed through the AC pipe and attached to a test-station or valve box located at each new break in the line for locating the abandoned main in the future (See ASBESTOS CEMENT (AC) TEST STATION DETAIL).
- F. Test stations will be installed flush to (final) grade in a vertical manner located in the ground above the water main. Each test station may have multiple tracing wire(s) routed into the test station and attached to the board on the underside of the test station lid. The wires shall be of sufficient length to extend at least 12-inches above the finished grade of the test station, but not excessive.
- G. Test Stations shall be Handley Industries, Inc. model number T451B55 or approved equal. Generally, test stations shall be approximately 6 inches in diameter and with a cast iron lid and collar and 1.5 to 2 feet long, mounted on a rugged plastic key tube with sufficient strength to support vehicular traffic. The lid shall have a locking design with a 5 point nut measuring 7/8" diameter. The lid shall be cast with words "Water" using letters not less than 1-inch high and shall be painted blue from the factory. Test Stations shall contain a test board with a minimum of 2 post terminals connected by a shunt.

ATTACHMENT B ASBESTOS CEMENT (AC) CUTTING PROCEDURES

- 1. If possible, the AC pipe will be excavated from mill end to mill end and the entire section replaced.
- 2. If removing the entire section of pipe is impractical, an employee from the asbestos workers call-out list will be notified and assigned to perform the cutting of the AC pipe.
- 3. The employee performing the cutting shall wear <u>all</u> necessary personal protective equipment.
 - Hardhat
 - Safety shoes
 - Eye protection
 - Gloves
 - Disposable coveralls
 - Half-mask respirator with HEPA disposable filter
- 4. The area shall be properly demarcated with warning signs.
- 5. All personnel not engaged in the cutting operation shall remain a minimum of 15' away from the work area.
- 6. AC pipe cutting personnel shall <u>not</u> enter a work area which is considered unsafe (i.e. poor traffic control, excavation protection.)
- 7. AC pipe cutting personnel shall use a ratchet cutter or "star" cutter to perform the cutting operation. The use of abrasive cutting wheels, saws or other cutting tools is prohibited.
- 8. Water suppression shall be utilized at the point of cutting.
- 9. The cut may be finished with a hammer and chisel when cutting tools fail to complete the cut.
- 10. A HEPA vacuum shall be used to remove stray asbestos fibers from the clothing of AC pipe cutting personnel.
- 11. The AC pipe and all waste material will be disposed of using the following procedures:
 - A) Lengths of pipe exceeding 10' may be abandoned in place.
 - B) Lengths of pipe less than 10' in length shall be double wrapped in poly-wrap, marked with appropriate warning labels and disposed of in a landfill.

- C) All disposable waste material such as coveralls, gloves and respirator filters shall be disposed of in the same manner described in (B).
- 12. All non-disposable cutting equipment shall be thoroughly cleaned with soap and running water.
- 13. All cutting personnel shall shower and change uniforms after cutting and cleanup operations are complete. All uniforms worn during the cutting operation shall be cleaned by an outside service.
- 14. After cutting and clean-up operations are complete, all cutting personnel shall complete the AC Pipe Cutting Report and send to the Process Owner of Assuring Employee Health & Safety for review.

ACCEPTANCE TESTING

A chlorine injection system will be used to fill the new main. The LWC Construction Inspector will provide the equipment and materials (tablet or liquid) needed to inject the chlorine-based solution into the main. The Contractor shall assist the Inspector with the connection of hoses and the operation of valves.

SERVICE WORK

Contractor is responsible for obtaining all plumbing permits required for any service work. Prior to beginning service work, including the installation of in-line tees for large services, the Contractor shall make a thorough evaluation of each meter vault within the limits of the project. Discrepancies between the field conditions and the Project Plans shall be discussed with the Construction Inspector along with the KYTC Resident Engineer and/or the KYTC Inspector.

Copper couplings shall not be used under paved areas. In situations where the new main is located on the opposite side of the roadway from the existing main or where the existing main is located in the roadway, "long" service transfers shall be completed by advancing a new service line from the new main to the meter vault.

CUSTOMER SERVICES

Prior to beginning any work that requires a shut-off of the main or individual services, the work crew shall make a thorough evaluation of each service connection and meter vault within the limits of the shut-down. Discrepancies between the field conditions and the Project Plans shall be discussed with the Construction Inspector along with the KYTC Resident Engineer and/or the KYTC Inspector.

The contractor shall be responsible for making all connections to the distribution system and the individual customer services.

The type, size and condition of the existing customer service at the property line shall be verified before completing the service reconnection. Where lead is encountered at the property line and an existing property connection is not found, the service crew shall extend the service excavation up to three (3) feet behind the property line to remove additional lead and to search for an existing property connection. The service reconnection shall then be completed at the three-foot distance, or less, if an existing property connection is encountered.

The Contractor shall note that there may be critical customer services located within the limits of this project. Planned water outages affecting these services may require coordination with the affected customers. The Contractor shall provide to the Construction Inspector along with the KYTC Resident Engineer and/or the KYTC Inspector, a minimum two-week prior notice of planned water outages that effect large services (2-inch or larger) or critical customer services connected to medical facilities, schools, or day cares. The Contractor shall anticipate the need to schedule service work and tie-ins requiring planned water outages around the needs of these facilities.

New heavy frame and covers shall be used for meter vaults located in or relocated to paved areas or to areas subject to vehicular traffic.

POST CONSTRUCTION

All in-line and service valves installed and/or operated during the completion of this project shall be inspected after construction to verify that all valves used by the Contractor are left in the proper operating position. Unless otherwise noted, or directed, all gates shall be fully opened.

WARRANTIES

All pipeline work shall be warranted for two (2) years from the date of Final completion unless specified otherwise.

POLYETHYLENE ENCASEMENT SPECIFICATIONS

Polyethylene encasement shall consist of the following:

- A. 8 mil thick (linear low density polyethylene tube type)
- B. Conforming to the current AWWA Standard C105-05 shall be used with Ductile Iron Pipe only.
- C. Marking requirements for polywrap are as outlined in AWWA C105-05. Polywrap without correct markings will be rejected.
- D. Polyethylene adhesive tape must be compatible with polyethylene wrap and must be not be less than 5 mil thick.
- E. Polyethylene encasement shall be the COLOR BLUE. Other colors will be rejected.
- F.Contractor shall provide certificate of compliance for Polywrap.

DUCTILE IRON PIPE AND FITTINGS SPECIFICATIONS

SUBMITTALS

Shop drawings and manufacturer's literature for all CONTRACTOR supplied materials shall be promptly submitted to the LWC PROJECT MANAGER for approval.

The following items shall be submitted before delivery of ductile iron pipe or fittings:

- Certification by the manufacturer or supplier that the pipe furnished for this project meets all pertinent LWC and AWWA Standards.
- 2. Catalog cuts and installation instructions for boltless restrained joint pipe and mechanical joint retainer glands (where applicable).

PIPE SUPPLIER

Ductile iron pipe and fittings shall be as manufactured by an LWC prequalified vendor. Approved LWC Ductile Iron Pipe vendors include US Pipe and Foundry, American Cast Iron Pipe Company, Griffin Pipe Co., and Clow Water Systems Company.

PIPE MATERIAL

Ductile iron pipe shall conform to the latest specifications as adopted by American National Standards Institute, Inc., (ANSI) and American Water Works Association (AWWA). Specifically, ductile iron pipe shall conform to ANSI/AWWA C151/A21.51.

The pipe shall be coated outside with a bituminous coating in accordance with ANSI/AWWA C151/A21.51. The pipe interior shall be lined with two layers of cement mortar and seal coated in compliance with the latest revision of ANSI/AWWA C104/A21.4.

The class of pipe to be furnished shall be pressure class 350.

Testing

Each length of pipe shall be subjected to a hydrostatic proof test as required by ANSI/AWWA C151/A21.51.

Joints

1. Mechanical and Push-On

Mechanical and push-on joints including accessories shall conform to ANSI/AWWA C111/A21.11.

2. Restrained

When restrained joints are required, they shall be boltless push-on type. Boltless restrained joints shall be either U.S. Pipe and Foundry "TR Flex", American Ductile Iron Pipe "Flex-Ring", or equal. Restrained joint pipe shall be furnished with a factory welded retaining ring. The use of field installed retaining rings such as "Gripper Rings" and "Field Lock Gaskets" will be permitted for 12" and smaller ductile iron water main only.

MARKING PIPE

Each pipe, fitting or special section shall have the following plainly marked thereon:

- 1. Pipe Class
- 2. Date of Manufacture
- 3. Manufacturer's name or trademark
- 4. On bends, the angle turned thereby
- 5. Manufacturer's identification number

INSTALLATION

A. Push-On Joints

The surfaces with which the rubber gasket comes in contact shall be thoroughly cleaned just prior to assembly. The gasket shall then be inserted into the groove in the bell. Before starting joint assembly, a liberal coating of special lubricant shall be applied to the gasket and the spigot end. With the spigot end centered in the bell, the spigot end is pushed home.

B. Mechanical Joints

All components shall be cleaned and lubricated with soapy water prior to assembly. Slip the follower gland and gasket over the pipe plain end making sure the small side of the gasket and lip of the gland face the bell socket. Insert the plain end into socket. Push gasket into position with fingers, gasket should be evenly seated.

Slide gland into position, insert bolts and tighten by hand. Bolts are then tightened alternately (across from one another) to the following normal torques:

Bolt Size	Torque Range (Foot-Pounds)
0.50"	40 - 60
0.75"	60 - 90
1"	70 - 100
1.25"	90 – 120

C. Restrained Joints

1. Push-On

Assemble and install the push-on joint according to the manufacturer's recommendations. The joint shall be thoroughly cleaned and lubricated. Check the retainer ring fastener.

During "pushing home" of any style piping, timber shall be placed between the jacking device (backhoe bucket, pipe jack, etc.) and the pipe being driven home.

VALVES AND APPURTENANCES

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, materials, equipment, and incidentals required and install complete and ready for operation all gate valves and appurtenances as shown on the Project Drawings and as specified herein. Supplier shall design, manufacture, shop test, and deliver all valves and accessories, including actuators in strict accordance with American Water Works Association (AWWA) Standard C515-09, AWWA Standard For Resilient Seated Gate Valves
- B. The equipment shall include but is not limited to the following:
 - Gate Valves

1.02 DESCRIPTION OF SYSTEMS

A. All of the equipment and materials specified herein is intended to be standard for use in controlling the flow of water.

1.03 QUALIFICATIONS

A. The gate valves shall be Iron body, Resilient Seat Gate Valve as manufactured by United States Pipe and Foundry Company, of Birmingham, Alabama; or American Flow Control Series 2500, or an approved equal. For proposed equals, the CONTRACTOR shall submit manufacturer's information and specifications to the LWC Project Manager, no later than 5 working days before the scheduled bid opening, for PRE-APPROVAL as an equal. All valves and appurtenances shall be of the size shown on the Project Drawings and as far as possible all equipment of the same type shall be from one manufacturer. All valves and appurtenances shall have the name of the maker, flow-directional arrows, and the working pressure for which they are designed cast in raised letters on some appropriate part of the body.

1.04 SUBMITTALS

A. Complete Shop Drawings of all valves and appurtenances shall be submitted to the LWC Project Manager for approval.

1.05 OPERATING INSTRUCTIONS

A. Manufacturer's operating and maintenance instructions shall be furnished to the LWC Project Manager for equipment furnished under this Section.

- B. The valve manufacturer shall supply and integrally mount all valve operators at the factory. The valve and operators shall be shipped as a unit.
- C. All valves shall open clockwise (to the right).
- D. Valve operator shall be provided with enclosed bevel gearing to reduce the torque required to operate the valve. The maximum required input torque to the actuator shall not exceed 125 foot-pounds, and shall meet AWWA Class 150B maximum operating torque for the respective valve. The actuators shall be full gasket, suitably seal, grease-packed for life, and designed to withstand submersion in water to 10 psi.
- E. The actuator shall be fitted with a 2-inch AWWA valve-operating nut, cast iron.
- F. The number of turns shall not be less 3 times the valve diameter (inches) or more than 4 times the valve diameter to open or close the valve.

1.06 TOOLS

A. Special tools, if required for normal operation and maintenance shall be supplied with the equipment.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. General

- 1. All valves and appurtenances shall be of the size shown on the Drawings and as far as possible all equipment of the same type shall be from one manufacturer.
- 2. All valves and appurtenances shall have the name of the manufacturer, flow direction arrows, and the working pressure for which they are designed cast in raised letters upon some appropriate part of the body.
- 3. Except as otherwise shown on the Drawings or specified herein, all valves with operators located 6 feet or more above the operating floor shall be provided with chain wheel operators complete with chain guides and galvanized steel chain.
- 4. All valves shall open Right (clockwise).

2.02 PRODUCTS

A. Gate Valves

- 1. General Requirements.
 - a. Unless otherwise specified below, these requirements shall apply to all gate valves.
 - Gate valves shall meet the requirements of AWWA C500 and AWWA C515-09 as applicable to the type of valve specified.
 - c. Exposed valves shall be furnished with Class 250 flanged ends; provide valves with outside screw and yoke.
 - d. The valve body, bonnet and gate castings shall be constructed of ductile iron, and shall have full shell thickness according to AWWA C515-09, table 2, section 4.4.
 - e. Except as otherwise specified, valves shall be rated for the following working water pressures:

Valve Size Pressure (psig) 3-inch to 48-inch 250

All valve bodies shall be hydrostatically tested to at least twice the rated working water pressure of 250psi. In addition, valves shall be seattested, bi-directional at the rated working pressure, with a bubble tight seal. Provide certificates of testing.

- f. Flanged valves to have face-to-face dimensions per ANSI C115.
- g. All bonnet and packing gland bolts shall be zinc or cadmium electroplated steel; packing gland bolts shall have bronze nuts.
- h. All valves shall be marked per AWWA Standards, including name of manufacturer, valve size and working pressure and year of manufacture.
- i. Resilient-seated gate valves shall conform in all respects to ANSI/AWWA C515-09 with non-rising stems, fully bronze mounted with O-ring seals. Valves shall be of standard manufacture and of the highest quality both as to materials and workmanship and shall conform to the latest revisions of AWWA Specification C-500. Valves shall have a rated working pressure of 250 psi, and test pressure of 500 psi and shall be opened by turning clockwise only.
- j. Shall be designed for buried service where groundwater may completely submerge the valve and actuator. Gate valves shall be furnished with mechanical joint end connections with stainless steel hardware T-316, unless otherwise shown on the plans or specified herein. The end connections shall be suitable to receive ductile iron pipe. All gate valves

shall be mechanically restrained to pipe utilizing a positive mechanical restraint such as American's Coupling Gland Ends, or equal, employing stainless steel 316 bolts and nuts. No friction type restraint such as Megalugs will be acceptable.

- k. Shall have the name or monogram of the manufacturer, the year the valve casting was made, the size of the valve, and the working pressure cast on the body of the valve. The valve body shall be ductile iron
- I. Shall be installed in a horizontal stem position, with actuator located in a manhole vault. (At the time of shop drawing review, the LWC Project Manager will advise which side of the valve the actuator will be located.)
- m. Subjected to a non-shock shutoff pressure of as much as 150 psi in the event of an emergency closure.
- n. Shall be used for potable water service with a temperature range of 34 degrees F to 85 degrees F and a pH range of 8.0 to 8.5

2. Valve Applications

- a. Valves for Potable Water Service.
- b. Gate Valves shall be resilient seated Metroseal manufactured by U.S. Pipe, or equal.

3. Valve Requirements

- a. Resilient Seated
 - Conform to AWWA C515-09.
 - Internal and external epoxy of valve body, including bonnet, per AWWA C550.
 - Gate shall be encapsulated with synthetic rubber. It shall be bonded and vulcanized in accordance with ASTM B429 Method B.
 - No recesses in valve body.
 - Valves shall be installed in the vertical position.

4. Buried Valves

- a. Conform to the requirements above, except mechanical joint bell ends per AWWA C111. All exposed valve hardware (nuts, bolts, washers, etc.) including bonnet, bonnet cover, stuffing box, gear adaptor and joints shall be Type 316 stainless steel.
- b. Non-rising stem design, double O-ring seals for non-geared valves and shall incorporate packing for geared valves.
- c. Provide valve box, 2-inch operating nut and extension stem and stem cover, and tee handled valve wrenches.

PART 3: EXECUTION

3.01 INSTALLATION

- A All valves and appurtenances shall be installed in the locations shown, true to alignment and rigidly supported. Any damage to the above items shall be repaired to the satisfaction of the LWC Project Manager before they are installed.
- B After installation, all valves and appurtenances shall be tested at the same duration and pressure as the piping system they are in. If any joint proves to be defective, it shall be repaired to the satisfaction of the LWC Project Manager.
- C Install all brackets, extension rods, guides, the various types of operators and appurtenances as shown on the Drawings that are in masonry floors or walls, and install concrete inserts for hangers and supports as soon as forms are erected and before concrete is poured. Before setting these items, the Contractor shall check all plans and figures which have a direct bearing on their location and he shall be responsible for the proper location of these valves and appurtenances during the construction of the structures.
- D All materials shall be carefully inspected for defects in workmanship and materials; all debris and foreign material cleaned out of valve openings, etc.; all operating mechanisms operated to check their proper functioning, and all nuts and bolts checked for tightness. Valves and other equipment which do not operate easily, or are otherwise defective, shall be repaired or replaced at not additional cost.
- E Unless otherwise specified or approved by the LWC Project Manager, all newly installed gate valves shall maintain a minimum 12" of cover as measured from the top of ground elevation to the top nut elevation.
- F All valves and appurtenances shall be installed in the locations shown, true to alignment and rigidly supported. Any damage to these items shall be repaired or replaced to the satisfaction of the LWC Project Manager before they are installed.
- G After installation, all valves and appurtenances shall be tested at least one (1) hour at the working pressure corresponding to the class of pipe, unless a different test pressure is specified. If any joint proves to be defective, it shall be repaired to the satisfaction of the LWC Project Manager.
- H All materials shall be carefully inspected for defects in workmanship and materials; all debris and foreign material cleaned out of valve openings, etc.; all operating mechanisms operated to check their proper functioning; and all nuts and bolts checked for tightness. Valves and other equipment that do not operate easily, or are otherwise defective, shall be repaired or replaced at no additional cost to the OWNER.

3.02 SHOP PAINTING

- A Interior surfaces of all valves except the exterior surfaces of buried valves and miscellaneous piping appurtenances shall be given a shop finish of an asphalt varnish conforming to Federal Specification TT-V51e for Varnish Asphalt.
- B. The exterior surface of various parts of valves, operators, floorstands and miscellaneous piping shall be thoroughly cleaned of all scale, dirt, grease or other foreign matter and thereafter one shop coat of an approved rust-inhibitive primer such as Inertol Primer No. 621 shall be applied in accordance with the instructions of the paint manufacturer. Ferrous surfaces obviously not to be painted shall be given a shop coat of grease or other suitable rust-resistant coating.
- C General The finish coating materials shall be suitable for potable water service, and shall conform to the applicable requirements of the latest revision to AWWA C550, Protective Interior Coatings for Valves and Hydrants. All internal and external surfaces, except finished or bearing surfaces, shall be shop-cleaned and coat-applied in accordance with this Specification and with the applicable Steel Structure Painting Council (SSPC) Specifications. A light color shall be used to enhance inspection and maintenance.
- D Surface Preparation Surface irregularities, such as weld spatter, burrs, and sharp or rough edges, shall be eliminated prior to surface preparation. Surfaces shall be prepared in accordance with Steel Structures Painting Council Specifications SP-6, Commercial Blast Cleaning, with 1.5-3.0 mils profile depth. If grease or spills are present, solvent cleaning to SSPC SP-1 quality must precede SP-6.
- Paint System and Application Coatings shall be applied in accordance with the recommendations found in SSPC PA-1, Shop, Field, and Maintenance Painting. The paint system shall be a two-coated catalyzed epoxy system for ferrous and non-ferrous metals subject to chemical corrosion or physical abrasion. The first coat shall be a high-build catalyzed epoxy with a minimum 50 percent solids applied by volume, applied at 6 8 mils (dry). The second coat shall be the same as the first coat. The system's total thickness shall be 12 mils (dry) minimum, and shall be holiday-free when tested in accordance with AWWA C550, using a holiday detector such as Tinker and Raser MI/AC.

3.03 INSPECTION AND TESTING

- A. The various pipelines in which the valves and appurtenances are to be installed are specified to be field-tested. During these tests any defective valve or appurtenance shall be adjusted, removed and replaced, or otherwise made acceptable to the LWC Project Manager.
- B. Valve and Actuator The test program outlined in AWWA Specification C515-09 shall be followed for Performance, Leakage, and Hydraulic tests. Valves are to be tested in both directions. A copy of a previous proof-of-design test shall be acceptable. The Supplier shall submit an affidavit of compliance with testing and other provisions of AWWA C515-09. The Supplier shall send a certification of compliance of capabilities of the actuators furnish as a component of each unit.
- C. Coating The Supplier shall submit an affidavit of compliance, signifying that the coating and application complies with the requirements of AWWA C550 Protective Interior Coatings for Valves and Hydrants and Steel Structure Painting Council's Steel Structures Painting Manual, Volumes 1 and 2. Test data related to the requirements of Section 2 and the toxicological compatibility of the coating materials with potable water application shall be submitted along with the affidavit.

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Standard Sanitary Sewer Bid Item Descriptions

S BYPASS PUMPING This item shall include all labor, equipment, and materials needed to complete a bypass pumping and/or hauling operation for diversion of sewage during sanitary sewer construction. Examples of such operations when bypass pumping and/or hauling may be necessary is during force main tie-ins, manhole invert reconstruction, insertion of new manholes into existing mains, or other similar construction. There may be more than one bypass pumping/hauling operation on a project. This item shall be paid for each separate bypass pumping/hauling operation occurrence as called out on the plans or directed by the engineer and actually performed. There will be no separate bid items defined for length, duration, or volume of sewage pumped or hauled in each occurrence. If a bypass pumping/hauling operation is called out on the plans; but, conditions are such that the bypass pumping/hauling operation is not needed or utilized, no payment will be made under this item. The contractor shall draw his own conclusions as to what labor, equipment, and materials may be needed for each bypass pumping/hauling occurrence. The contractor should be prepared to handle the maximum volume of the sewer being bypassed, even during a storm event. This item shall not be paid separately, but shall be considered incidental, when bypass pumping and/or hauling is needed during cast-in-placepipe (CIPP) and/or point repair operations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

S CIPP LATERAL SERVICE INVSTIGATION This item shall include all equipment, materials, labor and incidentals necessary to enter the sewer in compliance with all safety/confided space requirements and perform the identification, assessment and pre-measurement of all existing and abandoned laterals for the placement of Cured-In-Place-Pipe lining. This item shall be in payment for all lateral service investigation for all sewer segments to be lined as a part of this contract. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be LUMP SUM (LS).

S CIPP LATERAL REINSTATEMENT This item is to pay for installing a Cured-In-Place-Pipe liner in service laterals and service/mainline connections to stabilize structural defects and construction inadequacies. This bid item shall include all labor, equipment, materials and incidentals necessary to perform the service lateral reinstatement in accordance with the plans and specifications. Work under this item shall include sewer flow control, pre-installation cleaning, sealing connections to existing sewer main, pre- and post- construction CCTV inspection and final testing of the CIPP system. This item shall also include the "top hat" required by the specifications. All CIPP lateral reinstatements shall be paid under this item regardless of the size or length of reinstatement. No separate bid items of varying sizes or length of CIPP lateral reinstatement will be provided in the contract. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each CIPP lateral reinstatement complete and ready for use.

S CIPP LINER This bid Item is to pay for rehabilitation of existing sanitary sewers using the Cured-In-Place-Pipe method. This bid item description applies to all CIPP sizes included in the contract.

All CIPP Liner items of all varying sizes shall include all labor, materials, customer notification, testing, necessary permits, ingress and egress procedures, bypass pumping, pre- construction video, sediment and root removal, dewatering, traffic control, erosion and sediment control, excavation pits, removal and replacement of manhole frames and covers as necessary to facilitate the lining work, sealing at manholes and service connections, clearing and grubbing, pipeline cleaning, re-cleaning and video inspection as many times as necessary, debris collection and disposal, root removal, pre- and post-construction video inspection, all digital inspection footage, final report preparation and approval, the cost of potable water from the Owner, required compliance tests, site restoration, site cleanup, sealing of liner at manholes, acceptance testing and all other rehabilitation work and incidentals not included under other pay items necessary to complete the rehabilitation per the plans and specifications. There will be no separate payment for acceptance testing of the lined pipe; but shall be considered incidental to this item. Pay under this item shall be by each size bid in the contract. Pay measurement shall be from center of manhole to center of manhole. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S CIPP PROTRUDING LATERAL REMOVAL This item includes all equipment, materials, labor and incidentals necessary to enter the sewer in compliance with all safety/confined space requirements, remove a sufficient amount of the protruding tap to insure a proper and safe Cured-In-Place-Pipe lining insertion and perform pre-installation CCTV. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each protruding lateral removed.

S CONCRETE PIPE ANCHOR This item shall be constructed on the sewer pipe at the locations shown on the plans in accordance with sanitary sewer specifications and standard drawings. Payment for concrete anchors will be made at the contract unit price each in place complete and ready for use. Each concrete anchor of sewer pipe or force main shall be paid under one bid item per contract regardless of the sizes of carrier pipe being anchored in the contract. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of force main or gravity sewer under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S ENCASEMENT CONCRETE Includes all labor, equipment, excavation, concrete, reinforcing

steel, backfill, restoration, and etc., to construct the concrete encasement of the sewer or force main as shown on the plans, and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasement shall be paid under one bid item included in the contract regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

S ENCASEMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches

Range 2 = All encasement sizes greater than 6 inches to and including 10 inches

Range 3 = All encasement sizes greater than 10 inches to and including 14 inches

Range 4 = All encasement sizes greater than 14 inches to and including 18 inches

Range 5 = All encasement sizes greater than 18 inches to and including 24 inches

Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S ENCASEMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open cut install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches

Range 2 = All encasement sizes greater than 6 inches to and including 10 inches

Range 3 = All encasement sizes greater than 10 inches to and including 14 inches

Range 4 = All encasement sizes greater than 14 inches to and including 18 inches

Range 5 = All encasement sizes greater than 18 inches to and including 24 inches

Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN This description shall apply to all PVC and ductile iron and polyethylene/plastic pipe bid items of every size and type, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specification), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. This item shall also include pipe anchors on polyethylene pipe runs as shown on the plans or required by the specifications to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN AIR RLS/VAC VLV This bid item description shall apply to all force main air release/vacuum valve installations of every size except those defined as "Special". This item shall include the air release/vacuum valve, main to valve connecting line or piping, manhole/vault/structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release/vacuum valve at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. All air release/vacuum valves on a project shall be paid under one bid item regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release/vacuum valve would a separate bid item be established. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of sewer or force main under streets, buildings, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. This bid item is to be used to relocate an existing force main at point locations such as to clear a conflict at a

proposed drainage structure, pipe or any other similar short relocation situation, and where the existing pipe material is to be reused. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specification as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case by case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Force Main Relocate shall not be paid on a linear feet basis; but shall be shall be paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

S FORCE MAIN TAP SLEVE/VALVE RANGE 1 OR 2 This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready for use in accordance with the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Range 1 = All live tapped main sizes up to and including 8 inches

Range 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN TIE-IN This bid description shall be used for all force main tie-in bid items of every size except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, testing and backfill required to make the force main tie-in as shown on the plans and in accordance with the specifications complete and ready for use. This bid item shall include purge and sanitary disposal of any sewage from any abandoned segments of force main. Pipe for tie-ins shall be paid under separate bid items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN VALVE This description shall apply to all force main valves of every size required in the plans and specifications, except those bid items defined as "Special". Payment under this description is to be for gate or butterfly force main valves being installed with new force main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, and etc., required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready f o r use. If required on plans and/or proposed adjoining DIP is restrained, force main valves s h a 11 be restrained. Force main valve restraint shall be considered incidental to the force main valve and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be

referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN VALVE BOX ADJUST Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, and etc., to adjust the top of the force main valve box to finished grade complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL CLEANOUT This item shall be for payment for installation of a cleanout in a service lateral line. This item shall include furnishing and installation of a tee, vertical pipe of whatever length required, and threaded cap. The cleanout shall extend from the lateral to final grade elevation. The size of the cleanout shall be equivalent to the size of the lateral. The cleanout materials shall meet the same specification as those for the lateral. The cleanout shall be installed at the locations shown on the plans or as directed by the engineer. Only one pay item shall be established for cleanout installation. No separate pay items shall be established for size or height variances. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL LONG SIDE This bid item description shall apply to all service lateral installations of every size up to and including 6 inch internal diameter, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service lateral installations where the ends of the lateral connection are on opposite sides of the public roadway. The new lateral must cross the centerline of the public roadway to qualify for payment as a long side lateral. The length of the service lateral is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service lateral across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL SHORT SIDE This bid item description shall apply to all service lateral installations of every size up to and including 6 inch, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap tee, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for lateral installations where both ends of the lateral connection are on the same side of the public roadway, or when an existing lateral crossing a public roadway will remain and is being extended, reconnected, or relocated with all work on one side of the public roadway centerline as shown on the plans. The length of the service lateral is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the lateral crosses a private residential or commercial entrance; but, not a public roadway. Private or commercial

entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LINE MARKER This item is for payment for furnishing and installing a ground level sewer utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

S MANHOLE Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole. Payment for manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup in accordance with the specifications and standard drawings. All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE ABANDON/REMOVE Payment under this item is for the partial removal and/or filling of any sanitary sewer manhole regardless of size or depth that no longer serves any purpose. Payment shall be made regardless of whether the manhole is or is not in conflict with other work. Any manhole requiring partial removal, but not total removal, in order to clear a conflict with other work shall be paid under this item. All manholes partially removed shall be removed to a point at least one foot below final grade, one foot below roadway subgrade, or one foot clear of any other underground infrastructure, whichever is lowest. If partial removal of an abandoned manhole is elected by the contractor, the remaining manhole structure shall be refilled with flowable fill. Payment for disposal of a sanitary sewer manhole will be made under this item only. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE ADJUST TO GRADE Payment under this item is for the adjustment of sanitary sewer casting elevation on all sizes of existing sanitary manholes. This work shall be performed in accordance with the sanitary sewer specifications. Payment shall be made under this bid item regardless of the amount of adjustment necessary to a sanitary sewer manhole casting or diameter of the manhole. Work under this pay item may be as simple as placing a bed of mortar under a casting; but, shall also be inclusive of installation of adjusting rings, and /or addition, removal, or replacement of barrel sections. The existing casting is to be reused unless a new casting is specified on the plans. New casting, when specified, shall be paid as a separate bid item. Anchoring of the casting shall be incidental to this item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA)

when complete.

S MANHOLE CASTING STANDARD Payment under this bid items is for furnishing of a new standard traffic baring casting for sanitary manholes meeting the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

S MANHOLE CASTING WATERTIGHT Payment under this bid item is for furnishing of a new watertight traffic baring casting for sanitary manholes meeting the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

S MANHOLE RECONSTRUCT INVERT This bid item is to pay for all labor, equipment, and material for rework of the manhole bench to redirect or eliminate flow, such as when the flow of a pipe or pipes are being removed or redirected. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in elimination or redirect of flow. This item shall also include providing and placement of a rubber seal or boot as required by utility specification, standard drawing or plan. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. No payment shall be made under this bid when MANHOLE TAP EXISTING, or MANHOLE TAP EXISTING ADD DROP are being paid at the same location, as this type of work is included in those items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE TAP EXISTING This bid item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base, addition of a rubber seal as specified, and rework of the manhole bench to direct the additional pipe flow. The bid item shall be paid for each core opening added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE TAP EXISTING ADD DROP This bid item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base, addition of a rubber seal as specified, addition of a vertical drop pipe to the outside of the manhole, placement of reinforcing steel and concrete to encase vertical pipe, and rework of the manhole bench to direct the additional pipe flow. The bid item shall be paid for each drop added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and

scope of work needed to comply with the specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH DROP Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole with drop. Payment for drop manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Drop manholes shall include concrete base, barrel sections, drop materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH LINING Payment under this item is for the installation of new 4 foot interior diameter sanitary sewer manhole with corrosion resistant lining. Payment for manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, lining, excavation, backfilling, air testing, restoration, and cleanup in accordance with the standard drawings. All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH TRAP Payment under this item is for the installation of a new manhole with trap. Payment for trap manholes will be made at the contract unit price each in place complete and ready for use at the locations shown on plans in accordance with specifications and standard drawings. Trap manholes shall include concrete base, manhole structure and trap materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S PIPE This description shall apply to all PVC and ductile iron gravity sewer pipe bid items of every size and type 8 inches internal diameter and larger, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to,

tap tees and couplings for joining to existing similar or dissimilar pipes), polyethylene wrap (if required by specification), labor, equipment, excavation, bedding, restoration, pressure or vacuum testing, temporary testing materials, video inspection, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. This bid item shall include material and placement of flowable fill under existing and proposed pavement, and wherever specified on the plans or in the specifications. No additional payment will be made for rock excavation. Measurement of quantities under this item shall be through fittings and encasements to a point at the outside face of manhole barrels, or to the point of main termination at dead ends or lamp holes. Carrier pipe placed within an encasement shall be paid under this item and shall include casing spacers and end seals. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S PIPE POINT REPAIR This item is to be used to pay for repair of short lengths of existing sanitary sewer pipe that, through prior video inspection or other means, are known to have pre-existing failure. Pipe Point Repair may be needed in preparation for installation of cured-in-place-pipe (CIPP) lining or other instances where failure is known and repair is prudent. The size of pipe shall not be defined in separate bid items. All diameter sizes of point repair shall be paid under this one item. The materials to be used to make the repair shall be as defined on the plans or in the specifications. This bid item shall include all excavation, pipe materials, joining materials to connect old and new pipe, bedding, and backfill to complete the repair at the locations shown on the plans or as directed by the engineer, complete and ready for use. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

S PUMP STATION This item is for payment for installation of sanitary pump stations including above or below ground structure for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) for each when complete.

S STRUCTURE ABANDON This item is to be used to pay for abandonment of larger above or below ground sewer structures such as air release/vacuum valve vaults, pump stations, tanks, etc. Payment under this time shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to sewer construction, (i.e., abandonment of standard air release/vacuum valves up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S STRUCTURE REMOVAL This item is to be used to pay for removal of larger above or below ground sewer structures such as air release/vacuum valve vaults, pump stations, tanks, and etc. Payment under this time shall not be limited to size or scope; however, structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to sewer

JEFFERSON COUNTY DE05620551572

construction, (i.e., removal of standard air release/vacuum valves and their structure up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Standard Electric and Communications Bid Item Descriptions

BOLLARDS This item is for payment for furnishing and installing protective guard posts at above ground utility installations. A bollard may consist of, but not limited to, a steel post set in concrete or any other substantial post material. This item shall include all labor, equipment, and materials needed for complete installation of the bollard as specified by the utility owner specifications and plans. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item paid EACH (EA) when complete.

NOTE: A bid code for this item has been established in standard roadway bid items and shall be used for payment of this item. The bid code is 21341ND.

EC DUCT These items shall include all labor, equipment, and material to excavate, install, and backfill the specified bank of duct at locations shown in the plans in accordance with the specifications and standard drawings complete and ready for use. These bid items shall include all necessary appurtenances, connections, fittings, plugs, tees, bends, collars, racks or spacers, pull string, granular or concrete encasement, compacted earth or flowable fill backfill, and etc. Flowable fill, where specified on the plans and specifications, shall be considered incidental to the duct items. No separate payment will be made for flowable fill, unless directed to be used contrary to plans and specifications. All excavation shall be unclassified. No additional payment will be made for rock excavation. Duct shall be measured as the horizontal distance from outside face of structure to outside face of structure; or, to the point of duct termination at dead ends or poles. No additional payment will be made for vertical conduit. No separate bid items will be provided due to varying duct sizes. Any and all duct sizes and configurations shall be paid under these items. The only variations in bid items shall be in the number of duct in a bank and if the duct is or is not to be concrete encased. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

EC ELECTRIC MANHOLE, ELECTRIC PIT, ELECTRIC PULL BOX, COMMUNICATIONS MANHOLE, COMMUNICATIONS PULL BOX These items shall include all labor, equipment, excavation, materials, and backfill to install the specified manhole, pit, or pull box at the locations as shown on the plans in accordance with the specifications and standard drawings complete and ready for use. No separate bid items will be provided for varying sizes of structures. All structures shall be paid under the appropriate bid item regardless of size. Where structures are specified to be backfilled with flowable fill, the cost of the flowable fill shall be considered incidental to the bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

EC LINE MARKER This item is for payment for furnishing and installing a ground level electric or communications utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

Kentucky Transportation Cabinet Jefferson County Item 5-8501.00 Fairdale Roundabout

AT&T Kentucky

Supplementary Specifications For

AT&T Kentucky Buried Conduit and Manhole Installations
To be constructed as part of
KYTC's – Fairdale Roundabout Project

Project Summary

AT&T Kentucky to place buried conduit in Right-of-Way as part of the roadway contract (Item 5-8501.00). The roadway contractor will only be responsible for construction of the conduit run itself. At the time of construction, AT&T Kentucky will supply all materials necessary for the construction of the proposed facilities. With respect to facilities within the new ducts, this will be handled by others.

• See Construction Plans – Sheet U07-U16

Scope of Work

- 1. A new multi-duct system of varying configurations will be constructed under this contract.
- 2. The new sections of duct bank are to be constructed concurrent with the construction of the proposed roadway. The horizontal location is identified on the plans. Several items to consider:
 - The 85 If of proposed duct bank between the existing LG&E pole at Sta. 153+73.5 Rt. 20.1' and the proposed AT&T MH-1 at Sta. 152+82.5 Rt. 37' will be composed of six (6) ducts is a three by 2 (3x2) configuration.
 - The 65 If of proposed duct bank between the proposed AT&T MH-1 at Sta, 152+82.5 Rt. 37' and the proposed AT&T MH-2 at Sta. 152+80.5 Lt. 35.4' will be composed of nine (9) ducts in a three by three (3x3) configuration.

- The 222 If of proposed duct bank between the proposed AT&T MH-2 at Sta, 152+80.5 Lt. 35.4' and the proposed AT&T MH-3 at Sta. 150+74 Lt. 73' will be composed of nine (9) ducts in a three by three (3x3) configuration.
- The 152 If of proposed duct bank between the proposed AT&T MH-3 at Sta. 150+74 Lt. 73' and the proposed bend at Sta. 112+04.8 Rt. 46.8' will be composed of six (6) ducts in a three by two (3x2) configuration.
 - The 85 If of proposed duct bank between the proposed bend at Sta. 112+04.8 Rt. 46.8' and the existing LG&E pole at 112+82.2 Rt. 17.2' will be composed of four (4) ducts from the six (6) ducts going into the bend.
 - The 144 If of proposed duct bank between the proposed bend at Sta. 112+04.8 Rt. 46.8' and the existing LG&E pole at 113+41.7 Rt. 16.7' will be composed of two (2) ducts from the six (6) ducts going into the bend.
- The 470 lf of proposed duct bank between the proposed AT&T MH-3 at Sta, 150+74 Lt. 73' and the proposed AT&T MH-4 at Sta. 119+45 Lt. 30' will be composed of six (6) ducts in a three by two (3x2) configuration.
- The 37 lf of proposed duct bank between the proposed AT&T MH-4 at Sta, 119+45 Lt. 30' and the proposed AT&T pole at Sta. 119+40 Rt. 13' will be composed of six (6) ducts in a three by two (3x2) configuration.
- The 748 If of proposed duct bank between the proposed AT&T MH-1 at Sta, 152+82.5 Rt. 37' and the proposed AT&T MH-5 at Sta. 137+42 Rt. 36.5' will be composed of six (6) ducts in a three by two (3x2) configuration.
- The 17 lf of proposed duct bank between the proposed AT&T MH-5 at Sta. 137+42 Rt. 36.5' and the existing LG&E pole at Sta. 137+38.1 Rt. 16.7' will be composed of six (6) ducts in a three by two (3x2) configuration.
- A single proposed duct shall be installed parallel to the three by two (3x2) duct bank from the proposed AT&T MH-5 to the proposed pedestal at Sta. 140+03 Rt. 60' to service the replacement for the existing secure connection at the fire station.
 - The Fairdale Fire Department will have to provide the connection from the proposed pedestal in to the fire station.
- The proposed duct banks will be constructed via open trench installation.
- The proposed duct banks will maintain forty-eight (48) inches of minimum cover.
- Pulling tape shall be placed within each new duct installed.
- All ends shall be capped for each of the new ducts installed.
- 3. As noted, the proposed duct banks are for future use. The contractor will not be responsible for installing cable within the proposed ducts.

Construction of the proposed conduit shall be performed in accordance with the AT&T Kentucky Telecommunications drawings showing plan, profile (where specified), and typical details.

Method of Measurement

Plastic telephone conduit of specified duct configuration will be measured in linear feet along the centerline of the duct run.

Basis of Payment

Payment will be made at the contract unit price for each duct configuration and/or encasement. Estimated quantities are identified on the "Utility Summary – Telephone (AT&T Kentucky) Utility Relocation" provided in the plan set.

<u>Contractor is alerted that AT&T Kentucky will provide materials.</u> See paragraph 3 of the specification section below.

Contractor is to perform all work required to build the conduit system including excavation, placement, encasement, backfilling and surface restoration. In addition to Kentucky Transportation Cabinet Resident Engineer, telephone facility construction will also be inspected by the AT&T Kentucky Contract Supervisor. Conduit cannot be covered until inspected by an AT&T Kentucky inspector.

Specifications

1) Construction of conduit will be in accordance with the following AT&T and AT&T Kentucky System Practices:

AT&T Practice 622-020-020 Conduit and Manhole Construction

AT&T Practice 622-020-100 Conduit and Conduit Couplings

AT&T Kentucky System Practice 622-100-010 Conduit and Manhole Precautions

AT&T Kentucky System Practice 622-640-201 C Plastic Polyvinyl Chlorine (PVC) And Polypropylene Conduit Direct Buried in Soil Main Conduit

AT&T Kentucky System Practice Addendum 622-340-201 SC Main Conduit - C Plastic Conduit

AT&T Kentucky System Practice 622-500-011 Manholes -General AT&T Kentucky System Practice 622-512-200 Manhole - Sealing Walls At conduit entrances

Practices can be reviewed by contacting AT&T Kentucky contact person referenced at the end of this document.

- 2) Contractor is to advise AT&T Kentucky contact person of proposed start of construction a minimum of twenty-eight (28) calendar days before start date.
- 3) Materials provided by AT&T Kentucky except for trench backfill materials.

The following materials will be provided by AT&T Kentucky: All 4-inch diameter Plastic Conduit.

Four (4) standard 4'x6'x8' Pre-cast Concrete Manholes and one (1) special order 4'x6'x8' Pre-cast Concrete Manhole with customized knock-out locations.

Contractor is to advise AT&T Kentucky contact person fourteen (14) calendar days in advance of required delivery of each shipment of conduit. A twenty-eight (28) calendar day lead-time should be considered for all other AT&T Kentucky provided materials. Access route to delivery locations for conduit must be provided by contractor.

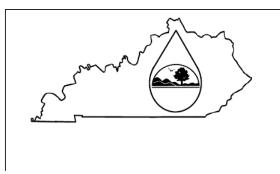
- 4) A minimum of forty-eight (48) inches of cover will be required over the top of the conduit except where specified on the plan sheets.
- 5) Excavation, backfill and surface restoration are incidental to the bid items shown on the "Telephone (AT&T Kentucky) Utility Relocation Summary".
- 6) AT&T Kentucky does not state the types of materials to be removed for conduit installation. Any excavation required for such installation, including rock or any other materials, is incidental to the items listed on the "unit to bid on" summary.
- 7) AT&T Kentucky Contact Persons

Manager Outside Plant Planning and Engineering Design

Morgan Herndon 3719 Bardstown Road Louisville, Kentucky 40218 Office No. 502-458-7312 Cell No. 502-526-8814

Construction Inspector TBD

AT&T Kentucky Supplemental Specifications 20150928.docx



KENTUCKY POLLUTION DISCHARGE

ELIMINATION SYSTEM (KPDES)

Notice of Intent (NOI) for coverage of Storm Water Discharge Associated with Construction Activities Under the KPDES Storm Water General Permit KYR100000

Click here for Instructions (Controls/KPDES_FormKYR10_Instructions.htm)

Click here to obtain information and a copy of the KPDES General Permit. (http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)

(*) indicates a required field; (\checkmark) indicates a field may be required based on user input or is an optionally required field

			•						
Reason for Submittal:(*)	Agency Interest ID:				Permit Number:(✓)				
Application for New Permit Coverage	Agency Interest ID			KPDES Permit Number					
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(🗸)									
ELIGIBILITY: Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.									
EXCLUSIONS: The following are excluded from coverage under this general permit: 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan; 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation; 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.									
SECTION I FACILITY OPERATOR INFORMATI	ION (PERMI	TTEE)							
Company Name:(🗸) KyTC, District 5			rst Name:(✓) First Name		M.I.:	Last Name:(✓) Last Name			
Mailing Address:(*) PO Box 22129	City:(*)	е		State:(*) Kentucky		Zip:(*) 40242-3042			
eMail Address:(*)			Business Phone:(*)			Alternate Phone:			
Elizabeth.Niemann@ky.gov			502-210-5400			Phone			
SECTION II GENERAL SITE LOCATION INFOR	RMATION								
Project Name:(*) Status of Owner/Operator(*) SIC Code(*)									
Fairdale Intersection Improvements			State Government			1611 Highway and Street			
Company Name:(✓) First Na			e:(√)	M.I.:	Last Name:(✓)				
KyTC, District 5	KyTC, District 5			rst Name MI			Last Name		
Site Physical Address:(*)									
KY 2055									
City:(*)			State:(*)		Zip:(*)				
Louisville	Louisville			Kentucky			40118		
County:(*)	Latitude(decimal degrees)(*)DMS to DD				Longitude(decimal degrees)(*)				
Jefferson	Converter (http://transition.fcc.gov/mb/audio/bickel/DDDMM\$S								
	decimal.html) 38.104917								
30.104317									
SECTION III SPECIFIC SITE ACTIVITY INFORMATION 2									
Project Description:(*)									
Construct Roundabout Intersection Improvements									
a. For single projects provide the following information									
Total Number of Acres in Project:(✓) Total Number of Acres Disturbed:(✓)									

3.71			3.71						
Anticipated Start Date:(✔)			Anticipated Completion Date:(Anticipated Completion Date:(✓)					
b. For common plans of deve	elopment provide the f	following information							
Total Number of Acres in Projec	ct:(✓)		Total Number of Acres Disturb	ed:(✓)					
# Acre(s)			# Acre(s)						
Number of individual lots in development, if applicable:(✓)			Number of lots in development:(✓)						
# lot(s)			# lot(s)						
Total acreage of lots intended to	o be developed:(✓)		Number of acres intended to be	e disturbed at any one time:	(✓)				
Project Acres	roject Acres			Disturbed Acres					
Anticipated Start Date:(✓)			Anticipated Completion Date:(✓)						
List Building Contractor(s) at the	e time of Application:(*	")		Г					
Company Name +									
<					>				
SECTION IV IF THE PERMIT	TED SITE DISCHAR	GES TO A WATER E	BODY THE FOLLOWING INFORMA	ATION IS REQUIRED 👩					
Discharge Point(s):									
Unnamed Tributary?	Latitude	Longitude	Receiving Water Name						
1 Yes 2 Yes	38.105339 38.105779	-85.758287 -85.759720	Little Bee Lick Creek Bee Lick Creek	Delete Delete					
3 Yes	38.105883	-85.759680	Bee Lick Creek	Delete					
SECTION V IF THE PERMIT Name of MS4: Date of application/notification to overage: Date			Discharge Point(s):(*) Latitude Long		Y				
SECTION VI WILL THE PRO	JECT REQUIRE CON	ISTRUCTION ACTIV	TITIES IN A WATER BODY OR THE	E RIPARIAN ZONE?	>				
Will the project require construct									
riparian zone?:(*)			No		<u> </u>				
f Yes, describe scope of activity	y: (✔)		describe scope of activity						
s a Clean Water Act 404 permit	t required?:(*)		No		~				
s a Clean Water Act 401 Water									
	r Quality Certification r	equired?:(*)	No		<u> </u>				

First Name:(*)		lame:(*) t Name		Company Name:(*) Company Name				
Mailing Address:(*) Mailing Address	City:(*)					Zip:(*) Zip		
eMail Address:(*) eMail Address			Business I Phone	Phone:(*)	Phone:			
SECTION VIII ATTACHMENTS								
Facility Location Map:(*)			Upload file					
Supplemental Information:			Upload f	file				
SECTION IX CERTIFICATION								
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.								
Signature:(*)		Title:(*)						
Signature				Title				
First Name:(*) M.I.: First Name MI			Last Name:(*) Last Name					
eMail Address:(*)		Business Phone:(*) Phone		Alternate Phone: Signature Phone Date		Signature Date:(*)		
Click to Save Values for Future Ret	rieval Click to S	Submit to DEP						



Kentucky Transportation Cabinet Highway District 5

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Fairdale Road/Manslick Road (KY 2055)/
Mitchell Hill Road/Mount Holly Road (KY 2055)
Intersection Improvements

Project: PCN ## - ####

Six Year Plan Item No. 5-8501.00

KPDES BMP Plan Page 1 of 14

Project information

Note -(1) = Design (2) = Construction (3) = Contractor

- 1. Owner Kentucky Transportation Cabinet, District 5
- 2. Resident Engineer: (2)
- 3. Contractor name: (2)

Address: (2)

Phone number: (2)

Contact: (2)

Contractors agent responsible for compliance with the KPDES permit requirements (3):

- 4. Project Control Number (2)
- 5. Route (Address) KY 2055
- 6. Latitude/Longitude (project mid-point) 38°06'18"N/85°45'32"W
- 7. County (project mid-point) Jefferson
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

A. Site description:

- Nature of Construction Activity (from letting project description) Construct Roundabout Intersection at Manslick Road/Mt. Holly Road/Fairdale Road intersection and realign Mitchell Hill Road to intersect with Roundabout.
- 2. Order of major soil disturbing activities (2) and (3)
- 3. Projected volume of material to be moved 3587 C.Y.
- 4. Estimate of total project area (acres) 3.71
- 5. Estimate of area to be disturbed (acres) 3.71
- 6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
- Data describing existing soil condition Grass covered soils consisting of moist medium stiff to stiff lean clays having the Unified Soil Classification of CL.
- 8. Data describing existing discharge water quality (if any) (2)
- 9. Receiving water name Bee Lick Creek and Little Bee Lick Creek
- 10. TMDLs and Pollutants of Concern in Receiving Waters: (1 DEA)
- 11. Site map Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
- 12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

- 2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
- 3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - ➤ Construction Access This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover

or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

- Clearing and Grubbing The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved
 - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - Brush and/or other barriers to slow and/or divert runoff.
 - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
 - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
 - Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) A final BMP Plan will result from modifications during this phase of construction. Probably changes include:

- Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
- Permanent Seeding and Protection
- Placing Sod
- Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: Erosion Control Blanket and Permanent Turf Reinforcement Mat

C. Other Control Measures

 No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.

2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

Hazardous Products:

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

Petroleum Products:

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

> Fertilizers:

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

> Paints:

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

Concrete Truck Washout:

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

> Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as

appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.

- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

E. Maintenance

- 1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
- Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance.

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F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- ➤ Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- > Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- ➤ Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- ➤ Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

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- Water from water line flushings.
- > Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

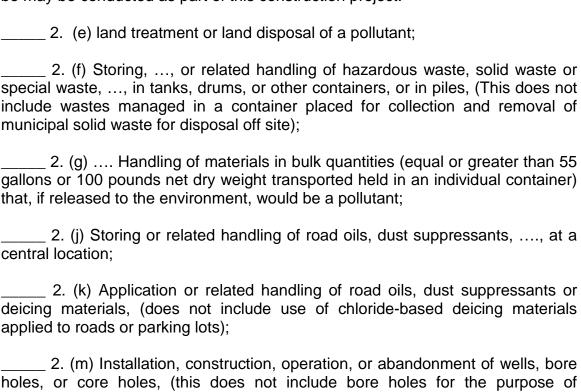
H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractors statement: (3)

explosive demolition);

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:



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Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the

401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

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Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Enginee	er signature	
Signed Typed or p	title rinted name ²	,signature
(3) Signed	title	
Typed or prir	nted name ¹	signature

- 1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.
- 2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

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Sub-Contractor Certification

Subcontractor

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

	Name: Address: Address:		
	Phone:		
The pa	rt of BMP plan this subo	contractor is responsible to	o implement is:
Kentuc dischar dischar	ky Pollutant Discharge ges, the BMP plan that ged as a result of stori	Elimination System permit has been developed to make the events associated with	ns and conditions of the general that authorizes the storm water nanage the quality of water to be the construction site activity and ified as part of this certification.
Signed	Typed or printed name	title, e ¹	signature

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

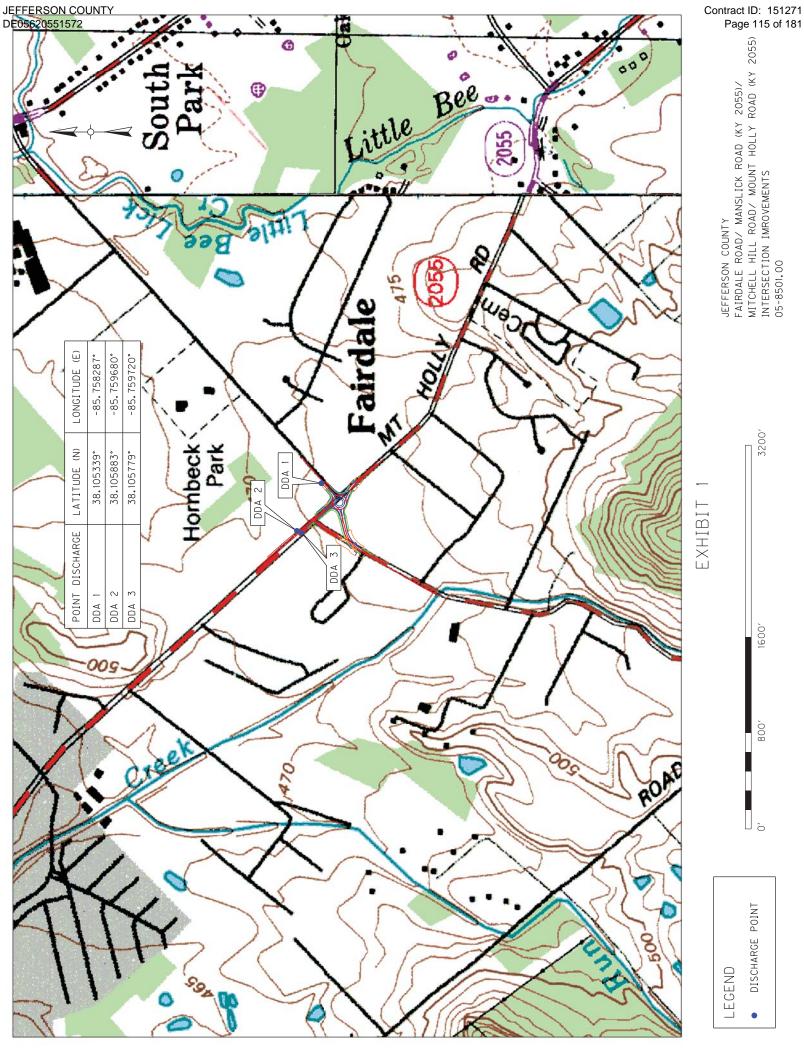
EXHIBIT #2

Item # 05-8501.00 Fairdale Road, Manslick Road (KY 2055), Mitchell Hill Road, Mount Holly Road (KY 2055) Intersection Improvements

KPDES eNOI for Stormwater Discharges Associated with Construction Activity Under the KPDES General Permit

Transaction ID:

f5fec22b-4aea-40c9-84b5-f59db840102f



DISCHARGE POINT LEGEND

3200′ 1600′ 800,

FAIRDALE ROAD/ MANSLICK ROAD (KY 2055)/
MITCHELL HILL ROAD/ MOUNT HOLLY ROAD (KY 2055)
INTERSECTION IMROVEMENTS
05-8501.00 JEFFERSON COUNTY

SPECIAL NOTE FOR PRE-BID CONFERENCE JEFFERSON COUNTY ~ DISTRICT 5 CID 15-1271

The Department will conduct a Mandatory Pre-Bid Conference for the subject project on Monday, November 9, 2015 at 10:00 AM EST at;

KYTC Department of Highways District 5 8310 Westport Road Louisville, KY 40242 502-210-5400

Any company that is interested in bidding on the subject project or being part of a joint venture shall be represented at the conference by at least <u>one person of sufficient authority to bind the company.</u> No individual can represent more than one company. At the conference, a roster shall be taken of the representatives present. Only companies represented at the conference will be eligible to have their bids opened at the date of letting.

The purpose of the conference is to familiarize all prospective bidders with the contract requirements within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the project.

No site visit will be required. However, the Contractor is encouraged to visit the site prior to bidding to become familiar with the requirements of this work. The Cabinet will not consider any claims due to the Contractor having not been familiarized with the requirements of this work.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

Subsection	102.15 Process Agent.			
Revision:	Replace the 1st paragraph with the following:			
Revision:	Every corporation doing business with the Department shall submit evidence of compliance with			
	KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-			
	220, and file with the Department the name and address of the process agent upon whom process			
	may be served.			
Subsection:	105.13 Claims Resolution Process.			
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer			
Revision:	available through the forms library and are forms generated within the AASHTO SiteManager			
	software.			
Subsection:	108.03 Preconstruction Conference.			
Revision:				
Revision:	Replace 8) Staking with the following: 8) Staking (designated by a Professional Engineer of Land Surveyor licensed in the			
	8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the			
Subsection:	Commonwealth of Kentucky. 109.07.02 Fuel.			
Revision:	Revise item Crushed Aggregate Used for Embankment Stabilization to the following:			
Revision:	Crushed Aggregate Crushed Aggregate			
	Used for Stabilization of Unsuitable Materials			
	Used for Embankment Stabilization			
	Delete the following item from the table. Crushed Sandstone Base (Coment Treated)			
Subsections	Crushed Sandstone Base (Cement Treated) 110.02 Demobilization.			
Revision:	Replace the first part of the first sentence of the second paragraph with the following:			
Revision.	Perform all work and operations necessary to accomplish final clean-up as specified in the first			
	paragraph of Subsection 105.12;			
Subsections	112.03.12 Project Traffic Coordinator (PTC).			
Revision:	Replace the last paragraph of this subsection with the following:			
Kevision.	Ensure the designated PTC has sufficient skill and experience to properly perform the task			
	assigned and has successfully completed the qualification courses.			
Subsection:	112.04.18 Diversions (By-Pass Detours).			
Revision:	Insert the following sentence after the 2nd sentence of this subsection.			
ite vision.	The Department will not measure temporary drainage structures for payment when the contract			
	documents provide the required drainage opening that must be maintained with the diversion.			
	The temporary drainage structures shall be incidental to the construction of the diversion. If the			
	contract documents fail to provide the required drainage opening needed for the diversion, the			
	cost of the temporary drainage structure will be handled as extra work in accordance with section			
	109.04.			
Subsection:				
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the			
	general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth			
	of Kentucky.			
	<u> </u>			

Subsections	201.04.01 Contractor Staking.			
Revision:	_			
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of			
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the			
G 1 4	Commonwealth of Kentucky.			
202200000	206.04.01 Embankment-in-Place.			
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable			
	excavation included in the original plans that is disposed of for payment and will consider it			
	incidental to Embankment-in-Place.			
	208.02.01 Cement.			
Revision:	Replace paragraph with the following:			
	Select Type I or Type II cement conforming to Section 801. Use the same type cement			
	throughout the work.			
	208.03.06 Curing and Protection.			
Revision:	Replace the fourth paragraph with the following:			
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured			
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day			
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below			
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)			
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit			
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department			
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the			
	Department at least 3 day notice of the request for a shortened curing period. The Department			
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish			
	cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened			
	curing time is requested. The Department will test cores using an unconfined compression test.			
	Roadbed cores must achieve a minimum strength requirement of 80 psi.			
Subsection:	208.03.06 Curing and Protection.			
Revision:	Replace paragraph eight with the following:			
	At no expense to the Department, repair any damage to the subgrade caused by freezing.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	A) Seed Mixtures for Permanent Seeding.			
Revision:	Revise Seed Mix Type I to the mixture shown below:			
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)			
	35% Hard Fescue (Festuca (Festuca longifolia)			
	10% Ryegrass, Perennial (Lolium perenne)			
	5% White Dutch Clover (Trifolium repens)			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	A) Seed Mixtures for Permanent Seeding.			
Number:	2)			
Revision:	Replace the paragraph with the following:			
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed			
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course			
	replace the crown vetch with Kentucky 31 Tall Fescue.			

a	212.22.22.2		
	212.03.03 Permanent Seeding and Protection.		
Part:	A) Seed Mixtures for Permanent Seeding.		
Number:	3)		
Revision:	Replace the paragraph with the following:		
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.		
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to		
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.		
Subsection:	212.03.03 Permanent Seeding and Protection.		
Part:	B) Procedures for Permanent Seeding.		
Revision:	Delete the first sentence of the section.		
Subsection:	212.03.03 Permanent Seeding and Protection.		
Part:	B) Procedures for Permanent Seeding.		
Revision:	Replace the second and third sentence of the section with the following:		
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of		
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural		
	limestone to the seedbed when the Engineer determines it is needed. When required, place		
	agricultural limestone at a rate of 3 tons per acre.		
Subsection:	212.03.03 Permanent Seeding and Protection.		
Part:	D) Top Dressing.		
Revision:	Change the title of part to D) Fertilizer.		
Subsection:	212.03.03 Permanent Seeding and Protection.		
Part:	D) Fertilizer.		
Revision:	Replace the first paragraph with the following:		
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use		
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the		
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10		
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000		
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply		
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional		
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of		
	an excessive application of fertilizer at no cost to the Department.		
Subsection:	212.03.03 Permanent Seeding and Protection.		
Part:	D) Fertilizer.		
Revision:	Delete the second paragraph.		
Subsection:	212.04.04 Agricultural Limestone.		
Revision:	Replace the entire section with the following:		
	The Department will measure the quantity of agricultural limestone in tons.		
Subsection:			
Revision:	Replace the entire section with the following:		
	The Department will measure fertilizer used in the seeding or sodding operations for payment.		
	The Department will measure the quantity by tons.		

Subsection:	212.05 PAYMENT.				
Revision:	Delete the following item code:				
	Code Pay Item Pay Unit				
	05966 Topdressing Fertilizer Ton				
Subsection:	212.05 PAYMENT.				
Revision:	Add the following pay items:				
	Code Pay Item Pay Unit				
	05963 Initial Fertilizer Ton				
	05964 20-10-10 Fertilizer Ton				
	05992 Agricultural Limestone Ton				
Subsection:	213.03.02 Progress Requirements.				
Revision:	Replace the last sentence of the third paragraph with the following: Additionally, the				
	Department will apply a penalty equal to the liquidated damages when all aspects of work are not				
	coordinated in an acceptable manner within 7 calendar days after written notification.				
Subsection:	213.03.05 Temporary Control Measures.				
Part:	E) Temporary Seeding and Protection.				
Revision:	Delete the second sentence of the first paragraph.				
Subsection:	304.02.01 Physical Properties.				
Table:	Required Geogrid Properties				
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.				
	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	B) Sampling.				
Revision:	Replace the second sentence with the following:				
	The Department will determine when to obtain the quality control samples using the random-				
	number feature of the mix design submittal and approval spreadsheet. The Department will				
	randomly determine when to obtain the verification samples required in Subsections 402.03.03				
	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.				
	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	D) Testing Responsibilities.				
Number:	3) VMA.				
Revision:	Add the following paragraph below Number 3) VMA:				
	Retain the AV/VMA specimens and one additional corresponding G _{mm} sample for 5 working				
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture				
	sample for 5 working days for mixture verification testing by the Department. When the				
	Department's test results do not verify that the Contractor's quality control test results are within				
	the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens				
	from the affected sublot(s) for the duration of the project.				
	402.03.02 Contractor Quality Control and Department Acceptance.				
Part:	D) Testing Responsibilities.				
Number:	4) Density.				
Revision:	Replace the second sentence of the Option A paragraph with the following:				
	Perform coring by the end of the following work day.				

402.03.02 Contractor Quality Control and Department Acceptance. **Subsection:** D) Testing Responsibilities. Part: Number: 5) Gradation. **Revision:** Delete the second paragraph. 402.03.02 Contractor Quality Control and Department Acceptance. **Subsection:** H) Unsatisfactory Work. Part: Number: 1) Based on Lab Data. **Revision:** Replace the second paragraph with the following: When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05. 402.03.03 Verification. **Subsection: Revision:** Replace the first paragraph with the following: **402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment. 402.03.03 Verification. **Subsection:** Part: A) Evaluation of Sublot(s) Verified by Department. Replace the third sentence of the second paragraph with the following: **Revision:** When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate. **Subsection:** 402.03.03 Verification. B) Evaluation of Sublots Not Verified by Department. Part: Replace the third sentence of the first paragraph with the following: **Revision:**

will resolve the discrepancy according to Subsection 402.03.05.

When differences between test results are not within the tolerances listed below, the Department

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	402.03.03 Verification.			
Part:	B) Evaluation of Sublots Not Verified by Department.			
Revision:	Replace the third sentence of the second paragraph with the following:			
	When the F -test or t -test indicates that the Contractor's data and Department's data are possibly			
	not from the same population, the Department will investigate the cause for the difference			
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems			
	appropriate.			
Subsection:	402.03.03 Verification.			
Part:	C) Test Data Patterns.			
Revision:	Replace the second sentence with the following:			
	When patterns indicate substantial differences between the verified and non-verified sublots, the			
	Department will perform further comparative testing according to subsection 402.03.05.			
Subsection:	402.03 CONSTRUCTION.			
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.			
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the			
	Department will obtain an additional verification sample at random using the Asphalt Mixture			
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and			
	Department's laboratory testing equipment and technicians. The Department will obtain a			
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it			
	according to AASHTO R 47. The Department will retain one split portion of the sample and			
	provide the other portion to the Contractor. At a later time convenient to both parties, the			
	Department and Contractor will simultaneously reheat the sample to the specified compaction			
	temperature and test the mixture for AV and VMA using separate laboratory equipment			
	according to the corresponding procedures given in Subsection 402.03.02. The Department will			
	evaluate the differences in test results between the two laboratories. When the difference			
	between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate			
	and resolve the discrepancy according to Subsection 402.03.05.			
Subsection:	402.03.04 Dispute Resolution.			
Revision:	Change the subsection number to 402.03.05.			
Subsection:	402.05 PAYMENT.			
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures			
Table:	AC			
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.			
Subsection:	` /			
Revision:	Replace the first sentence with the following:			
	In addition to the equipment specified above, provide a MTV with the following minimum			
	characteristics:			
Subsection:	412.02.09 Material Transfer Vehicle (MTV).			
Revision:	Replace the paragraph with the following:			
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.			

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	412.03.07 Placement and Compaction.			
Revision:	Replace the first paragraph with the following:			
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps			
	and/or shoulders unless specified in the contract. When the Engineer determines the use of the			
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that			
	portion of pavement by a letter documenting the waiver.			
	412.04 MEASUREMENT.			
Revision:	Add the following subsection:			
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for			
	payment and will consider its use incidental to the asphalt mixture.			
	501.03.05 Weather Limitations and Protection.			
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.			
	501.03.19 Surface Tolerances and Testing Surface.			
Part:	B) Ride Quality.			
Revision:	Add the following to the end of the first paragraph:			
	The Department will specify if the ride quality requirements are Category A or Category B when			
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when			
	the Department fails to classify which ride quality requirement will apply to the Contract.			
Subsections	603.03.06 Cofferdams.			
Revision:	Replace the seventh sentence of paragraph one with the following:			
Kevision.	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of			
	Kentucky.			
Subsection:	605.03.04 Tack Welding.			
Revision:	Insert the subsection and the following:			
THE VISION.	605.03.04 Tack Welding. The Department does not allow tack welding.			
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.			
Part:	A) Existing Bridges and New Structures.			
Number:	1) Prewetting and Grout-Bond Coat.			
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge			
	decks prepared by hydrodemolition.			
Subsection:	609.03 Construction.			
Revision:	Replace Subsection 609.03.01 with the following:			
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast			
	concrete release the temporary erection supports under the bridge and swing the span free on its			
	supports.			
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam			
	is placed in the final location and prior to placing steel reinforcement. At locations where lift			
	loops are cut, paint the top of the beam with galvanized or epoxy paint.			
P				

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	611.03.02 Precast Unit Construction.		
Revision:	Replace the first sentence of the subsection with the following:		
1	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for		
1	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with		
1	KY Table 1 (Precast Culvert KYHL-93 Design Table) , and Section 605 with the following		
	exceptions and additions:		
Subsection:	613.03.01 Design.		
Number:	2)		
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD		
	Bridge Design Specifications"		
Subsection:	615.06.02		
Revision:	Add the following sentence to the end of the subsection.		
1	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled		
1	3/4 inch.		
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.		
Revision:	Replace the reference of 6.6 in the section to 615.06.06.		
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.		
Revision:	Replace the reference of 6.7 in the section to 615.06.07.		
Subsection:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.		
Revision:	Replace the subsection with the following:		
1	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be		
1	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall		
1	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO		
1	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall		
1	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO		
1	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured		
1	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,		
1	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section		
1			
1	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded		
1	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires		
1	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing		
1	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to		
1	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be		
_	not more than 16 inches.		
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.		
Revision:	Replace the subsection with the following:		
1	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for		
1	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of		
1	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design		
1	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the		
1	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012		
1	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the		
1	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-		
1	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.		
	Comer of the wife facile check chair not be 1055 than 2 menes of more than 6 menes.		

Subsection:	615.08.01 Type of Test Specimen.	
Revision:	Replace the subsection with the following:	
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the	
	first batch of concrete. Acceptable start-up results are required for production of the first unit.	
	After the first unit has been established, random acceptance testing is performed daily for each	
	50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature	
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is	
	performed.	
Subsection:	615.08.02 Compression Testing.	
Revision:	Delete the second sentence.	
Subsection:	615.08.04 Acceptability of Core Tests.	
Revision:	Delete the entire subsection.	
Subsection:	615.12 Inspection.	
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the	
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the	
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting	
	from transport to the jobsite.	
	701.04.16 Deduction for Pipe Deflection.	
Revision:	Insert the following at the end of the paragraph:	
	The section length is determined by the length of the pipe between joints where the failure	
	occurred.	
	716.02.02 Paint.	
Revision:	Replace sentence with the following: Conform to Section 821.	
	716.03 CONSTRUCTION.	
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural	
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current	
G 1 4	interims,	
	716.03.02 Lighting Standard Installation.	
Revision:	Replace the second sentence with the following:	
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum	
Cubcotion	of four feet from the front face of the guardrail to the front face of the pole base.	
	716.03.02 Lighting Standard Installation. A) Conventional Installation.	
Part: Revision:	'	
VCA121011:	Replace the third sentence with the following: Orient the transformer base so the door is positioned on the side away from on-coming traffic.	
Subsection:	716.03.02 Lighting Standard Installation.	
Part:	A) Conventional Installation.	
Number:	1) Breakaway Installation and Requirements.	
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of	
TO TIDIOII.	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,	
	and Traffic Signals, 2013-6th Edition with current interims.	
Subsection:	716.03.02 Lighting Standard Installation.	
Part:	B) High Mast Installation	
Revision:	Replace the first sentence with the following: Install each high mast pole as noted on plans.	
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Subsection: 716.03.02 Lighting Standard Installation.

Part: Number:

B) High Mast Installation 2) Concrete Base Installation

Revision: Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
		3:1 Ground		2:1 Ground		1.5:1 Ground	
Level Ground		Sl	ope	Slope		Slope (2)	
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 f t	19 ft	7 f t	20 ft	7 ft	(1)	7 f t

Steel Requirements Vertical Bars Ties or Spiral Spacing or Size Total Size Pitch 16 #10

(1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.

(2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and onehalf closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection: 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

Revision:

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

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	716.03.03 Trenching.			
Part:	B) Trenching of Conduit for Non-Highmast Cables.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for			
	either situation listed previously, obtain the Engineer's approval and maintain the required			
	conduit depths coming into the junction boxes. No payment for additional junction boxes for			
	greater depths will be allowed.			
	716.03.10 Junction Boxes.			
Revision:	Replace subsection title with the following: Electrical Junction Box.			
	716.04.07 Pole with Secondary Control Equipment.			
Revision:	Replace the paragraph with the following:			
	The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any			
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them			
	incidental to this item of work. The Department will also not measure furnishing and installing			
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused			
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,			
	ground rods, and ground wires and will consider them incidental to this item of work.			
Subsection:	716.04.08 Lighting Control Equipment.			
Revision:	Replace the paragraph with the following:			
	The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,			
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item			
	of work. The Department will also not measure furnishing and installing electrical service			
	conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,			
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground			
	rods, and ground wires and will consider them incidental to this item of work.			
Subsection:	716.04.09 Luminaire.			
Revision:	Replace the first sentence with the following:			
	The Department will measure the quantity as each individual unit furnished and installed.			
Subsection:	716.04.10 Fused Connector Kits.			
Revision:	Replace the first sentence with the following:			
	The Department will measure the quantity as each individual unit furnished and installed.			
Subsection:	716.04.13 Junction Box.			
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.			
Subsection:				
Part:	A) Junction Electrical.			
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.			
Subsection:	716.04.14 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following:			
	The Department will not measure excavation, backfilling, underground utility warning tape (if			
	required), the restoration of disturbed areas to original condition, and will consider them			
	incidental to this item of work.			
	mordental to this item of work.			

Subsection:	716.04.18 Remove Lighting.						
Revision:	Replace the paragraph with the following:						
Tec vision.	The Department will measure the quantity as a lump sum for the removal of lighting equipment.						
	The Department will not measure the disposal of all equipment and materials off the project by						
	the contractor. The Department also will not measure the transportation of the materials and will						
	consider them incidental to this item of work.						
Subsection:	716.04.20 Bore and Jack Conduit.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear						
	feet. This item shall include all work necessary for boring and installing conduit under an						
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,						
	paragraphs 1, 2, and 4.						
Subsection:	716.05 PAYMENT.						
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>						
	<u>Unit</u> with the following:						
	<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>						
	04810 Electrical Junction Box Each						
	04811 Electrical Junction Box Type B Each						
	20391NS835 Electrical Junction Box Type A Each						
	20392NS835 Electrical Junction Box Type C Each						
Subsection:	723.02.02 Paint.						
Revision:	Replace sentence with the following: Conform to Section 821.						
Subsection:	723.03 CONSTRUCTION.						
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural						
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
	723.03.02 Poles and Bases Installation.						
Revision:	Replace the first sentence with the following:						
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum						
	of four feet from the front face of the guardrail to the front face of the pole base.						
	723.03.02 Poles and Bases Installation.						
Part:	A) Steel Strain and Mastarm Poles Installation						
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section 716.03.02. B). 2) Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions						
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions						
Subsection:	encountered during drilling and slope condition at the site. Refer to the design chart below:						
Subsection: Part:	723.03.02 Poles and Bases Installation.						
Revision:	B) Pedestal or Pedestal Post Installation. Replace the fourth sentence of the paragraph with the following: For breakaway supports,						
Kevisioii:							
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for						
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.						

	723.03.03 Trenching.					
Part:	A) Under Roadway.					
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,					
	obtain the Engineer's approval and maintain ether required conduit depths coming into the					
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.					
Subsection:	723.03.11 Wiring Installation.					
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of					
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.					
Subsection:	723.03.12 Loop Installation.					
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of					
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.					
Subsection:	723.04.02 Junction Box.					
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.					
Subsection:	723.04.03 Trenching and Backfilling.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to					
	original condition, and will consider them incidental to this item of work.					
Subsection:	723.04.10 Signal Pedestal.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling,					
	restoring disturbed areas, or other necessary hardware and will consider them incidental to this					
	item of work.					
	723.04.15 Loop Saw Slot and Fill.					
Revision:	Replace the second sentence with the following: The Department will not measure sawing,					
	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider					
	them incidental to this item of work.					
	723.04.16 Pedestrian Detector.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each					
	individual unit furnished, installed and connected to pole/pedestal. The Department will not					
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for					
	sign and will consider them incidental to this item of work.					
	723.04.18 Signal Controller- Type 170.					
Revision:	Replace the second sentence with the following: The Department will not measure constructing					
	the concrete base or mounting the cabinet to the pole, connecting the signal and detectors,					
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, or					
	electrical inspection fees and will consider them incidental to this item of work. The Department					
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian					
	isolators, load switches, model 400 modem card; furnishing and installing electrical service					
	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground					
	wires and will consider them incidental to this item of work.					

Subsection:	723.04.20 Install Signal Controller - Type 170.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each					
	individual unit installed. The Department will not measure constructing the concrete base or					
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,					
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical					
	inspection fees and will consider them incidental to this item of work. The Department will also					
	not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model					
	400 modem card; furnishing and installing electrical service conductors, specified conduits,					
	anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them					
	incidental to this item of work.					
Subsection:	723.04.22 Remove Signal Equipment.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump					
	sum removal of signal equipment. The Department will not measure the return of control					
	equipment and signal heads to the Department of Highways as directed by the District Traffic					
	Engineer. The Department also will not measure the transportation of materials of the disposal					
	of all other equipment and materials off the project by the contractor and will consider them					
	incidental to this item of work.					
Subsection:	723.04.28 Install Pedestrian Detector Audible.					
Revision:	Replace the second sentence with the following: The Department will not measure installing sign					
	R10-3e (with arrow) and will consider it incidental to this item of work.					
Subsection:	723.04.29 Audible Pedestrian Detector.					
Revision:	Replace the second sentence with the following: The Department will not measure furnishing					
	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.					
	723.04.30 Bore and Jack Conduit.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear					
	feet. This item shall include all work necessary for boring and installing conduit under an					
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,					
	paragraphs 1, 2, and 4.					
	723.04.31 Install Pedestrian Detector.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each					
	individual unit installed and connected to pole/pedestal. The Department will not measure					
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.					
	723.04.32 Install Mast Arm Pole.					
Revision:	Replace the second sentence with the following: The Department will not measure arms, signal					
	mounting brackets, anchor bolts, or any other necessary hardware and will consider them					
	incidental to this item of work.					
	723.04.33 Pedestal Post.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,					
	restoration, or any other necessary hardware and will consider them incidental to this item of					
	work.					

Subsoction	723.04.36 Traffic Signal Pole Base.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or						
G l ··	restoration and will consider them incidental to this item of work.						
	723.04.37 Install Signal Pedestal.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,						
	backfilling, restoration, or any other necessary hardware and will consider them incidental to this						
	item of work.						
	723.04.38 Install Pedestal Post.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,						
	backfilling, restoration, or any other necessary hardware and will consider them incidental to this						
	item of work.						
	723.05 PAYMENT.						
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>						
	<u>Unit</u> with the following:						
	<u>Code</u> <u>Pay Item</u> <u>Pay Unit</u>						
	04810 Electrical Junction Box Each						
	04811 Electrical Junction Box Type B Each						
	20391NS835 Electrical Junction Box Type A Each						
	20392NS835 Electrical Junction Box Type C Each						
	804.01.02 Crushed Sand.						
	Delete last sentence of the section.						
Subsection:	804.01.06 Slag.						
Revision:	Add subsection and following sentence.						
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only						
	in asphalt surface applications.						
Subsection:	804.04 Asphalt Mixtures.						
Revision:	Replace the subsection with the following:						
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as						
	necessary, to meet gradation requirements. The Department will allow any combination of						
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using						
	cold feeds at the plant. The Engineer may allow other fine aggregates.						
	806.03.01 General Requirements.						
Revision:	Replace the second sentence of the paragraph with the following:						
	Additionally, the material must have a minimum solubility of 99.0 percent when tested according						
	to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a J_{NR}						
	(nonrecoverable creep compliance) between 0.1 and 0.5, when tested according to AASHTO TP						
	70.						
	70.						

Subsections	806.03.01 General Requirements.					
	<u> </u>					
	PG Binder Requirements and Price Adjustment Schedule					
Revision.	Replace the Elastic Recovery, % ⁽³⁾ (AASHTO T301) and all corresponding values in the table with the following:					
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay MSCR recovery, % $^{(3)}$ 60 Min. ≥58 56 55 54 <53					
	(AASHTO TP 70)					
Subsection:	806.03.01 General Requirements.					
Table:	PG Binder Requirements and Price Adjustment Schedule					
Superscript:	(3)					
Revision:	Replace (3) with the following:					
	Perform testing at 64°C.					
Subsection:	813.04 Gray Iron Castings.					
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".					
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.					
Number:	A) Bolts.					
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:					
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as					
	applicable.					
Subsection:						
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph					
	4.1".					
	814.04.02 Timber Guardrail Posts.					
	Replace the first sentence of the fourth paragraph with the following:					
	Use any of the species of wood for round or square posts covered under AWPA U1.					
	814.04.02 Timber Guardrail Posts.					
	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph					
	4.1".					
	814.04.02 Timber Guardrail Posts.					
	Delete the second sentence of the fourth paragraph. 814 05 02 Composite Plastic					
Revision:	814.05.02 Composite Plastic.					
Kevision.	1) Add the following to the beginning of the first paragraph: Select composite offset blocks conforming to this section and assure blocks are from a manufacturer included on the					
	Department's List of Approved Materials.					
	2) Delete the last paragraph of the subsection.					
Subsection:	816.07.02 Wood Posts and Braces.					
	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph					
	4.1".					
Subsection:	816.07.02 Wood Posts and Braces.					
Revision:	Delete the second sentence of the first paragraph.					
	818.07 Preservative Treatment.					
Revision:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".					

Subsection:	834.14 Lighting Poles.					
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with					
	loading and allowable stress requirements of the AASHTO Standard Specifications for Structural					
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current					
	interims, with the exception of the following: The Cabinet will waive the requirement stated in					
	the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only).					
	The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).					
Subsection	834.14.03 High Mast Poles.					
Revision:	Remove the second and fourth sentence from the first paragraph.					
Subsection	834.14.03 High Mast Poles.					
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are					
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.					
	834.14.03 High Mast Poles.					
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595					
	grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield					
	strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a					
	constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential					
	welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are					
	telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and					
	the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the					
	inside diameter of the exposed end of the female section. Use longitudinal seam welds as					
	commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the					
	transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with					
	a telescopic welded joint or a full penetration groove weld with backup bar. The handhole cover					
	shall be removable from the handhole frame. One the frame side opposite the hinge, provide a					
	mechanism on the handhole cover/frame to place the Department's standard padlock as specified					
	in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge					
	to secure the handhole cover to the frame which includes providing stainless steel wing nuts and					
	washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel					
	(ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole					
	frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum					
	clear distance between the transverse plate and the bottom opening of the handhole shall not be					
	less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide					
	products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated					
	products that are not-drip garvanized to the requirements of either ASTW A123 (fabricated products) or ASTM A 153 (hardware items).					
Subsection:	834.16 ANCHOR BOLTS.					
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall					
	follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.					

Subsection:	834.17.01 Conventional.					
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on					
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture					
	by providing the first two numbers of the wattage.					
Subsection:	834.21.01 Waterproof Enclosures.					
Revision:	Replace the last five sentences in the second paragraph with the following sentences:					
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean					
	metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin					
	traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and					
	utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the					
	top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex					
	receptacle in the enclosure with a separate 20 amp breaker.					
Subsection:	835.07 Traffic Poles.					
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall					
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for					
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with					
	current interims.					
Subsection:	835.07 Traffic Poles.					
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates					
	have a thickness ≥ 2 inches.					
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall					
	not be less than 16.25 inches.					
Subsection:	835.07 Traffic Poles.					
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole					
	forces shall be positioned in such a manner to maximize the force on any individual anchor bolt					
	regardless of the actual anchor bolt orientation with the pole.					
Subsection:	835.07 Traffic Poles.					
Revision:	Replace the first and second sentence of the sixth paragraph with the following:					
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable					
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the					
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.					
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the					
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The					
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and					
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure					
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to					
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance					
	between the transverse plate and the bottom opening of the handhole shall not be less than the					
	diameter of the bottom tube but needs to be at least 12 inches.					
1						

Subsoction	835.07 Traffic Poles.						
Revision:							
Kevision.	*Replace the first sentence of the last paragraph with the following: Provide calculations and						
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.						
	*Replace the third sentence of the last paragraph with the following: All tables referenced in						
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway						
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.						
Subsection:	835.07.01 Steel Strain Poles.						
	Replace the second sentence of the second paragraph with the following:						
Kevision.	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealth						
	of Kentucky.						
Subsection:	835.07.01 Steel Strain Poles.						
	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should						
Ke vision.	be shown for all fatigue related connections. Provide the corresponding detail, stress category						
	and example from table 11.9.3.1-1.						
Subsection:	835.07.02 Mast Arm Poles.						
	Replace the second sentence of the fourth paragraph with the following: The detailed analysis						
TTC (ISTOTIC	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.						
Subsection:	835.07.02 Mast Arm Poles.						
	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should						
	be shown for all fatigue related connections. Provide the corresponding detail, stress category						
	and example from table 11.9.3.1-1.						
Subsection:	835.07.03 Anchor Bolts.						
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be						
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.						
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized						
	(ASTM A 153).						
Subsection:	835.16.05 Optical Units.						
Revision:	Replace the 3rd paragraph with the following:						
	The list of certified products can be found on the following website: http://www.intertek.com.						
	835.19.01 Pedestrian Detector Body.						
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum						
	rectangular housing that is compatible with the pedestrian detector.						
	843.01.01 Geotextile Fabric.						
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING						
Revision:	Add the following to the chart:						
	<u>Property</u> <u>Minimum Value⁽¹⁾</u> <u>Test Method</u>						
	CBR Puncture (lbs) 494 ASTM D6241						
	Permittivity (1/s) 0.7 ASTM D4491						

Table: Revision: TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS Add the following to the chart: Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 210 Permittivity (1/s) 0.5 Subsection: TyPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION Revision: Add the following to the chart: Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 Subsection: TyPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION Revision: Add the following to the chart: Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 Subsection: Table: TyPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Add the following to the chart: Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 Subsection: Table: 843.01.01 Geotextile Fabric. TyPE V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:	Subsection:	843.01.01 Geotextile Fabric.				
Property	Table:					
CBR Puncture (lbs) 210 ASTM D6241 Permittivity (1/s) 0.5 ASTM D4491 Subsection: Table: S43.01.01 Geotextile Fabric. TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION Add the following to the chart: Property Minimum Value(1) CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 ASTM D4491 Subsection: Type IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Revision: Add the following to the chart: Property Minimum Value(1) CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 ASTM D4491 Subsection: 843.01.01 Geotextile Fabric. Type IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Add the following to the chart: Property Minimum Value(1) CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 ASTM D4491 Subsection: 843.01.01 Geotextile Fabric. Type V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:	Revision:	Add the following to the cl	nart:			
Permittivity (1/s) 0.5 ASTM D4491		<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
Subsection: Table: Type III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION Add the following to the chart: Property				ASTM D6241		
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Revision: STABILIZATION Add the following to the chart: Property CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) Subsection: Table: Type IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Add the following to the chart: Property Minimum Value Minimum Value Test Method PAVEMENT EDGE DRAINS Add the following to the chart: Property Minimum Value CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) Subsection: Table: Type V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:	Subsection:	843.01.01 Geotextile Fabri	c.			
Revision: Add the following to the chart: Property Minimum Value (1) CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 Subsection: Table: Type IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Add the following to the chart: Property Minimum Value (1) CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 Subsection: Table: Type V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:	Table:		EXTILES FOR SUBGRADE OR EMBANKM	IENT		
Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 ASTM D4491 Subsection: Table: TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Revision: Add the following to the chart: Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 Subsection: 843.01.01 Geotextile Fabric. Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:		STABILIZATION				
CBR Puncture (lbs) 370 ASTM D6241 Permittivity (1/s) 0.05 ASTM D4491 Subsection: 843.01.01 Geotextile Fabric. Type IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Revision: Add the following to the chart: Property Minimum Value(1) Test Method CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 ASTM D4491 Subsection: 843.01.01 Geotextile Fabric. Table: Type V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:	Revision:	Add the following to the cl	nart:			
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Subsection: Table: Type IV Fabric Geotextile Fabric. Type IV Fabric Geotextile For Embankment Drainage Blankets and Pavement edge Drains Revision: Minimum Value Minimum Value Test Method CBR Puncture (lbs) 309 Permittivity (1/s) 0.5 Subsection: Table: Type V High Strength Geotextile Fabric. Type V High Strength Geotextile Fabric Make the following changes to the chart:		CBR Puncture (lbs)	370	ASTM D6241		
Table: TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS Revision: Minimum Value Minimum Value CBR Puncture (lbs) Permittivity (1/s) Subsection: Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:		Permittivity (1/s)	0.05	ASTM D4491		
Revision: PAVEMENT EDGE DRAINS Add the following to the chart: Property CBR Puncture (lbs) Permittivity (1/s) Subsection: Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Property Minimum Value ⁽¹⁾ ASTM D6241 ASTM D6241 ASTM D4491 Subsection: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Make the following changes to the chart:	Subsection:	843.01.01 Geotextile Fabric.				
Revision: Add the following to the chart: Property	Table:					
Property Minimum Value ⁽¹⁾ CBR Puncture (lbs) 309 ASTM D6241 Permittivity (1/s) 0.5 Subsection: 843.01.01 Geotextile Fabric. Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:		PAVEMENT EDGE DRAINS				
CBR Puncture (lbs) 309 Permittivity (1/s) 0.5 Subsection: 843.01.01 Geotextile Fabric. Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:	Revision:	Add the following to the chart:				
Permittivity (1/s) 0.5 ASTM D4491 Subsection: 843.01.01 Geotextile Fabric. Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:		<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
Subsection: 843.01.01 Geotextile Fabric. Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:	ļ	CBR Puncture (lbs)	309	ASTM D6241		
Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:		Permittivity (1/s)	0.5	ASTM D4491		
Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC Revision: Make the following changes to the chart:	Subsection:	843.01.01 Geotextile Fabric.				
	Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC				
D	Revision:	Make the following changes to the chart:				
Property Minimum Value Test Method		Property	Minimum Value ⁽¹⁾	Test Method		
CBR Puncture (lbs) 618 ASTM D6241				ASTM D6241		
Apparent Opening Size U.S. #40 ⁽³⁾ ASTM D4751		` '	U.S. $\#40^{(3)}$	ASTM D4751		
(3) Maximum average roll value.						
		ividaminani avorago fori variac.				

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SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

- 2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.
 - A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
 - B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
 - C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical

structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Turf Reinforcement Matting					
Properties ¹	Type 1	Type 2	Type 3	Type 4	Test Method
Minimum tensile Strength	125	150	175	3000 by 1500	ASTM D6818 ²
lbs/ft					
UV stability (minimum %	80	80	80	90	ASTM D4355 ³
tensile retention)					(1000-hr exposure)
Minimum thickness (inches)	0.25	0.25	0.25	0.40	ASTM D6525
Slopes applications	2H:1V	1.5H:1V	1H:1V or	1 H: 1V or	
	or flatter	or flatter	flatter	greater	
Shear stress lbs/ft ²	6.0^{4}	8.0^{4}	10.0^4	12.04	ASTM D6459
Channel applications					ASTM D6460-07

¹ For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting alone.

2.3 Quality Assurance Sampling, Testing, and Acceptance

- A) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- B) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- C) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

²Minimum Average Roll Values for tensile strength of sample material machine direction.

³Tensile Strength percentage retained after stated 1000 hr duration of exposure under ASTM D4355 testing. Based on nondegradable components exclusively.

⁴Maximum permissible shear design values based on short-term (0.5 hr) vegetated data obtained by full scale flume testing ASTM D6459, D6460-07. Based on nondegradable components exclusively. Testing will be done at Independent Hydraulics Facility such as Colorado State University hydraulics laboratory, Utah State University hydraulics laboratory, Texas Transportation Institute (TTI) hydraulics and erosion control laboratory.

Current mats meeting the above criteria are shown on the Department's List of Approved Materials.

- **2.4 Fasteners.** When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer's Representative. Provide staples with colored tops when requested by the Engineer.
- **3.0 CONSTRUCTION.** When requested by the Engineer, provide a Manufacturer's Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department's criteria and the Manufacturer's criteria, construct using the more restrictive. The Engineer and Manufacturer's Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer's recommendations and the following as minimum installation technique:
- **3.1 Site Preparation.** Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.
- **3.2 Installation.** Install mats according to Standard Drawing Sepias "Turf Mat Channel Installation" and "Turf Mat Slope Installation." Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer's Representative. The mat should be in direct contact with the soil surface.
- **4.0 MEASUREMENT.** The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer's Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	Pay Item	Pay Unit
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project, and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts
 and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of
 Transportation, Federal Highway Administration, as they may be amended from time to time, which are
 herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will_not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The contractor will_provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

JEFFERSON COUNTY DE05620551572

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY150100 09/25/2015 KY100

Superseded General Decision Number: KY20140100

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/02/2015	
1		01/23/2015	
2		01/30/2015	
3		02/20/2015	
4		05/01/2015	
5		05/22/2015	
6		06/05/2015	
7		06/12/2015	
8		06/19/2015	
9		08/21/2015	
10		09/04/2015	
11		09/11/2015	
12		09/25/2015	

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

	Rates	Fringes	
BRICKLAYER	\$ 24.11	10.07	
			-

BRKY0001-005 06/01/2015

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE COUNTIES:

	Rates	Fringes
BRICKLAYER	.\$ 25.96	10.64
BRKY0002-006 06/01/2011		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes	
BRICKLAYER	\$ 26.57	10.26	
BRKY0007-004 06/01/2014			

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER	\$ 30.57	17.94
BRKY0017-004 06/01/2009		

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER	\$ 24.11	9.97
CARP0064-001 05/01/2015		

	Rates	Fringes	
CARPENTER	•	16.06	
Diver	\$ 41.63	16.06	
PILEDRIVERMAN	\$ 27.75	16.06	

ELEC0212-008 06/01/2015

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN	.\$ 27.03	17.02
ELEC0212-014 12/01/2014		

BRACKEN, GALLATIN & GRANT COUNTIES:

Rates Fringes

Sound & Communication		
Technician	\$ 22.75	10.08
ELEC0317-012 05/28/2014		

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN		
Cable Splicer	.\$ 32.68	18.13
Electrician	.\$ 32.62	21.45
ELEC0369-007 05/27/2015		

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN	\$ 30.01	15.65
ELEC0575-002 06/02/2014		

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN	\$ 31.70	14.21
ENGI0181-018 07/01/2015		

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	\$ 29.95	14.40
GROUP 2	\$ 27.26	14.40
GROUP 3	\$ 27.68	14.40
GROUP 4	\$ 26.96	14.40

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller;
Batcher Plant; Bituminous Paver; Bituminous Transfer
Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All
Scoop; Carry Deck Crane; Central Compressor Plant; Cherry
Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over);
Concrete Paver; Truck-Mounted Concrete Pump; Core Drill;
Crane; Crusher Plant; Derrick; Derrick Boat; Ditching &
Trenching Machine; Dragline; Dredge Operator; Dredge
Engineer; Elevating Grader & Loaders; Grade-All; Gurries;
Heavy Equipment Robotics Operator/Mechanic; High Lift;
Hoe-Type Machine; Hoist (Two or More Drums); Hoisting
Engine (Two or More Drums); Horizontal Directional Drill
Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau;
Locomotive; Mechanic; Mechanically Operated Laser Screed;

Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.);
Bituminous Mixer; Boom Type Tamping Machine; Bull Float;
Concrete Mixer (Under 21 cu. ft.); Dredge Engineer;
Electric Vibrator; Compactor/Self-Propelled Compactor;
Elevator (One Drum or Buck Hoist); Elevator (When used to
Hoist Building Material); Finish Machine; Firemen & Hoist
(One Drum); Flexplane; Forklift (Regardless of Lift
Height); Form Grader; Joint Sealing Machine; Outboard Motor
Boat; Power Sweeper (Riding Type); Roller (Rock); Ross
Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid
Steer Machine with all Attachments; Switchman or Brakeman;
Throttle Valve Person; Tractair & Road Widening Trencher;
Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger;
Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

IRON0044-009 06/01/2015

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains, Ringos Mills, Tilton & Wallingford);
MASON (Western two-thirds, including Townships of Dover,
Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,
Murphysville, Ripley, Sardis, Shannon, South Ripley &

Washington);

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

	Rates	Fringes	
IRONWORKER			
Fence Erector	\$ 23 76	19.15	
Structural	·	19.15	

IRON0070-006 06/01/2015

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes
IRONWORKER	.\$ 27.56	20.30

IRON0372-006 06/15/2015

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, Excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains,

Ringos Mills, Tilton & Wallingford); MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,

Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers &

Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) COUNTIES

		Rates	Fringes
IRONWORKER, REINF	ORCING	\$ 27.00	19.00
IRON0769-007 06/	 		

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

I	Rates	Fringes
IRONWORKER		
ZONE 1\$	31.33	22.39
ZONE 2\$	31.73	22.39
ZONE 3\$	33.33	22.39

ZONE 1 - Up to 10 mile radius of Union Hall, Ashland, Ky., 1643 Greenup Ave.

ZONE 2 - 10 to 50 mile radius of Union Hall, Ashland, Ky., 1643 Greenup Ave.

ZONE 3 - 50 mile radius & over of Union Hall, Ashland, Ky., 1643 Greenup Ave.

LABO0189-003 07/01/2014

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	\$ 21.80	11.96
GROUP 2	\$ 22.05	11.96

GROUP	3\$	22.10	11.96
GROUP	4\$	22.70	11.96

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2014

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	22.71	11.05
GROUP	2\$	22.96	11.05
GROUP	3\$	23.01	11.05
GROUP	4\$	23.61	11.05

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-009 07/01/2014

BRECKINRIDGE & GRAYSON COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	22.66	11.10
GROUP	2\$	22.91	11.10
GROUP	3\$	22.96	11.10
GROUP	4\$	23.56	11.10

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway

Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder Brush & Roller	•	5.90 5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	¢ 22 20	5.90
Sandblasting &		
WaterblastingSpray		5.90 5.90

PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

Rates Fringes

PAINTER (Heavy & Highway

Bridges - Guardrails -	
Lightpoles - Striping)	
Bridge Equipment Tender	
and Containment Builder\$ 20.73	9.06
Brush & Roller\$ 23.39	9.06
Elevated Tanks;	
Steeplejack Work; Bridge &	
Lead Abatement\$ 24.39	9.06
Sandblasting & Water	
Blasting\$ 24.14	9.06
Spray\$ 23.89	9.06

PAIN0118-004 06/01/2014

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER		
Brush & Roller	\$ 18.50	11.97
Spray, Sandblast, Power		
Tools, Waterblast & Steam		
Cleaning	\$ 19.50	11.97

PAIN1072-003 12/01/2014

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

Painters:	
Bridges; Locks; Dams;	
Tension Towers & Energized	
Substations\$ 31.83	15.30
Power Generating Facilities.\$ 28.59	15.30

Rates

Fringes

* PLUM0248-003 06/01/2015

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
Plumber and Steamfitter	.\$ 34.00	19.04
PLUM0392-007 06/01/2014		

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

	Rates	Fringes
Plumbers and Pipefitters	.\$ 29.80	17.79
PLUM0502-003 08/01/2013		

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN

(Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	Rates	Fringes
PLUMBER	\$ 32.00	17.17

SUKY2010-160 10/08/2001

	Rates	Fringes
Truck drivers:		
GROUP 1	\$ 16.57	7.34
GROUP 2	\$ 16.68	7.34
GROUP 3	\$ 16.86	7.34
GROUP 4	\$ 16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-15-III- HWY dated July 20, 2015.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

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NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
11.2%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Jefferson County.

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

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PROPOSAL BID ITEMS

Report Date 10/30/15

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	2,367.70	TON		\$	
0020	00080		CRUSHED AGGREGATE SIZE NO 23	4,341.00	TON		\$	
0030	00190		LEVELING & WEDGING PG64-22	498.80	TON		\$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	1,607.80	TON		\$	
0050	00388		CL3 ASPH SURF 0.38B PG64-22	538.30	TON		\$	
0060	02101		CEM CONC ENT PAVEMENT-8 IN	228.10	SQYD		\$	
0070	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0800	02677		ASPHALT PAVE MILLING & TEXTURING	197.70	TON		\$	
0090	23188EC		STAMPED CONCRETE-10 IN	563.50	SQYD		\$	
0100	24829EC		CEM CONC ENT PAVEMENT-10 IN	562.40	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0110	01000		PERFORATED PIPE-4 IN	1,665.00	LF		\$	
0120	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS		\$	
0130	01314		PLUG PIPE	3.00	EACH		\$	
0140	01689		FLUME INLET TYPE 1 MOD	1.00	EACH		\$	
0150	01810		STANDARD CURB AND GUTTER	880.20	LF		\$	
0160	01820		LIP CURB AND GUTTER	199.30	LF		\$	
0170	01825		ISLAND CURB AND GUTTER	273.20	LF		\$	
0180	01875		STANDARD HEADER CURB	1,564.80	LF		\$	
0190	01891		ISLAND HEADER CURB TYPE 2	882.50	LF		\$	
0200	02014		BARRICADE-TYPE III	8.00	EACH		\$	
0210	02015		CEMENT CONCRETE ISLAND	18.20	SQYD		\$	
0220	02091		REMOVE PAVEMENT	260.00	SQYD		\$	
0230	02200		ROADWAY EXCAVATION	3,884.00	CUYD		\$	
0240	02355		GUARDRAIL-STEEL W BEAM-S FACE A	25.00	LF		\$	
0250	02360		GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH		\$	
0260	02429		RIGHT-OF-WAY MONUMENT TYPE 1	15.00	EACH		\$	
0270	02430		RIGHT-OF-WAY MONUMENT TYPE 1A	4.00	EACH		\$	
0280	02545		CLEARING AND GRUBBING (APPROXIMATELY 4.70 ACRES)	1.00	LS		\$	
0290	02562		TEMPORARY SIGNS	182.00	SQFT		\$	
0300	02611		HANDRAIL-TYPE A-1	64.00	LF		\$	
0310	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0320	02651		DIVERSIONS (BY-PASS DETOURS)	1.00	LS		\$	
0330	02701		TEMP SILT FENCE	190.00	LF		\$	
0340	02705		SILT TRAP TYPE C	57.00	EACH		\$	
0350	02708		CLEAN SILT TRAP TYPE C	57.00	EACH		\$	
0360	02720		SIDEWALK-4 IN CONCRETE	1,449.20	SQYD		\$	
0370	02726		STAKING	1.00	LS		\$	
0380	05950		EROSION CONTROL BLANKET	289.00	SQYD		\$	
0390	05952		TEMP MULCH	5,000.00	SQYD		\$	
0400	05953		TEMP SEEDING AND PROTECTION	3,750.00	SQYD		\$	
0410	05963		INITIAL FERTILIZER	.36	TON		\$	
0420	05964		20-10-10 FERTILIZER	.20	TON		\$	

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PROPOSAL BID ITEMS

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FΡ	AMOUNT
0430	05990		SODDING	5,081.00	SQYD		\$	
0440	05992		AGRICULTURAL LIMESTONE	1.86	TON		\$	
0450	06406		SBM ALUM SHEET SIGNS .080 IN	244.65	SQFT		\$	
0460	06410		STEEL POST TYPE 1	408.00	LF		\$	
0470	06510		PAVE STRIPING-TEMP PAINT-4 IN	5,000.00	LF		\$	
0480	06514		PAVE STRIPING-PERM PAINT-4 IN	8,035.00	LF		\$	
0490	06516		PAVE STRIPING-PERM PAINT-8 IN	76.00	LF		\$	
0500	06565		PAVE MARKING-THERMO X-WALK-6 IN	338.00	LF		\$	
0510	15094		S MANHOLE ADJUST TO GRADE	5.00	EACH		\$	
0520	20418ED		REMOVE & RELOCATE SIGNS	2.00	EACH		\$	
0530	21289ED		LONGITUDINAL EDGE KEY	924.00	LF		\$	
0540	21373ND		REMOVE SIGN	8.00	EACH		\$	
0550	22520EN		PAVE MARKING-THERMO YIELD BAR-36 IN	40.00	LF		\$	
0560	23158ES505		DETECTABLE WARNINGS	223.00	SQFT		\$	
0570	23261EC		PAVE MARK-THERMO-X-WALK-24 IN	373.00	LF		\$	
0580	24540		R/W MONUMENT TYPE 3	8.00	EACH		\$	
0590	24541		R/W MONUMENT TYPE 3A	6.00	EACH		\$	
0600	24814EC		PIPELINE INSPECTION	1,349.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0610	00521		STORM SEWER PIPE-15 IN	1,291.00	LF		\$	
0620	00522		STORM SEWER PIPE-18 IN	437.00	LF		\$	
0630	00524		STORM SEWER PIPE-24 IN	277.00	LF		\$	
0640	00554		STORM SEWER PIPE-24 IN EQUIV	265.00	LF		\$	
0650	00556		STORM SEWER PIPE-30 IN EQUIV	356.00	LF		\$	
0660	00558		STORM SEWER PIPE-36 IN EQUIV	69.00	LF		\$	
0670	01480		CURB BOX INLET TYPE B	11.00	EACH		\$	
0680	01538		DROP BOX INLET TYPE 7	6.00	EACH		\$	
0690	01544		DROP BOX INLET TYPE 11	20.00	EACH		\$	
0700	01559		DROP BOX INLET TYPE 13G	1.00	EACH		\$	
0710	01650		JUNCTION BOX	2.00	EACH		\$	
0720	01767		MANHOLE TYPE C	1.00	EACH		\$	
0730	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	5,468.00	SQYD	\$2.00	\$	\$10,936.00
0740	23952EC		DRAINAGE JUNCTION BOX TY B	3.00	EACH		\$	

Section: 0004 - UTILITY - AT&T

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FΡ	AMOUNT
0750	17500		EC COMMUNICATIONS MANHOLE INST	4.00	EACH		\$	
0760	17502		EC COMMUNICATIONS STRUCTURE SPECIAL INST	1.00	EACH		\$	
0770	17503		EC DUCT - 02 BANK INST	144.00	LF		\$	
0780	17505		EC DUCT - 04 BANK INST	85.00	LF		\$	
0790	17507		EC DUCT - 06 BANK INST	1,512.00	LF		\$	
0800	17510		EC DUCT - 09 BANK INST	287.00	LF		\$	
0810	17514		EC DUCT - SINGLE INST	231.00	LF		\$	

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PROPOSAL BID ITEMS

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Section: 0005 - UTILITY - TIME WARNER CABLE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0820	17501		EC COMMUNICATIONS PULL BOX INST	5.00	EACH		\$	
0830	17503		EC DUCT - 02 BANK INST	2,549.00	LF		\$	
0840	17514		EC DUCT - SINGLE INST	151.00	LF		\$	

Section: 0006 - UTILITY - WINDSTREAM

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0850	17514		EC DUCT - SINGLE INST	933.00	LF		\$	
0860	17518		EC ELECTRIC PULL BOX INST	2.00	EACH		\$	

Section: 0007 - UTILITY - LG&E

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0870	17503		EC DUCT - 02 BANK INST (CONCRETE ENCASED, 6-IN)	245.00	LF		\$	
0880	17505		EC DUCT - 04 BANK INST (CONCRETE ENCASED, 6-IN)	245.00	LF		\$	
0890	17510		EC DUCT - 09 BANK INST (CONCRETE ENCASED, 6-IN)	1,225.00	LF		\$	
0900	17514		EC DUCT - SINGLE INST (2-IN - STREET LIGHTING)	990.00	LF		\$	
0910	17516		EC ELECTRIC MANHOLE INST (12' X 7' X 6')	3.00	EACH		\$	
0920	17516		EC ELECTRIC MANHOLE INST (9' X 6' X5')	4.00	EACH		\$	
0930	21563NN		SPLICE BOX (STREET LIGHTING - INST)	11.00	EACH		\$	
0940	24122EC		TRANSFORMER PAD (ELECTRIC TRANSFORMER AND SWITCHGEAR)	28.00	CUYD		\$	

Section: 0008 - SEWER - MSD

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0950	01052	SEWER PIPE-8 IN	68.00	LF		\$	
0960	01787	REMOVE MANHOLE	1.00	EACH		\$	
0970	01799	SANITARY SEWER MANHOLE	2.00	EACH		\$	
0980	23551EC	TEMPORARY SEWERLINE DIVERSION	1.00	LS		\$	
0990	24246EC	REMOVE ABANDONED SANITARY SEWER	104.00	LF		\$	

Section: 0009 - SIGNALIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC FP AMOUNT
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PROPOSAL BID ITEMS

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LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1000	04740	POLE BASE	2.00	EACH		\$	
1010	04844	CABLE-NO. 14/5C	70.00	LF		\$	
1020	04950	REMOVE SIGNAL EQUIPMENT	2.00	EACH		\$	
1030	22939ND	INSTALL LUMINAIRE POLE	2.00	EACH		\$	
1040	24601EC	INSTALL (SOLAR POWERED BEACON CONTROLLER)	2.00	EACH		\$	

Section: 0010 - WATERLINE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1050	14021	W FIRE HYDRANT REMOVE	2.00	EACH		\$	
1060	14030	W METER RELOCATE	3.00	EACH		\$	
1070	14035	W PIPE DUCTILE IRON 04 INCH	310.00	LF		\$	
1080	14036	W PIPE DUCTILE IRON 06 INCH	60.00	LF		\$	
1090	14039	W PIPE DUCTILE IRON 12 INCH	1,325.00	LF		\$	
1100	14074	W PLUG EXISTING MAIN	4.00	EACH		\$	
1110	14094	W TIE-IN 06 INCH	2.00	EACH		\$	
1120	14095	W TIE-IN 08 INCH	2.00	EACH		\$	
1130	14097	W TIE-IN 12 INCH	1.00	EACH		\$	
1140	14104	W VALVE 04 INCH (RESILIENT SEAL)	2.00	EACH		\$	
1150	14105	W VALVE 06 INCH (RESILIENT SEAL)	1.00	EACH		\$	
1160	14106	W VALVE 08 INCH (RESILIENT SEAL)	1.00	EACH		\$	
1170	14108	W VALVE 12 INCH (RESILIENT SEAL)	11.00	EACH		\$	
1180	14510	W FIRE HYDRANT ASSEMBLY INST	2.00	EACH		\$	
1190	14519	W METER/FIRE SERVICE COMBO VAULT INST	1.00	EACH		\$	
1200	14564	W SERV PE/PLST LONG SIDE 1-1/2 IN INST	1.00	EACH		\$	
1210	14565	W SERV PE/PLST LONG SIDE 2 IN INST	1.00	EACH		\$	
1220	14566	W SERV PE/PLST LONG SIDE 3/4 IN INST	6.00	EACH		\$	
1230	14570	W SERV PE/PLST SHORT SIDE 2 IN INST	1.00	EACH		\$	
1240	14571	W SERV PE/PLST SHORT SIDE 3/4 IN INST	5.00	EACH		\$	
1250	14572	W SERVICE SPECIAL INST (DISCONTINUE)	5.00	EACH		\$	

Section: 0011 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT D	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1260	02569	D	DEMOBILIZATION	1.00	LS		\$	